

# PSYCHOLOGICAL ABSTRACTS

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# PSYCHOLOGICAL ABSTRACTS

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## GENERAL

1763. Baade, W. *Allgemeine Einführung in das Gesamtgebiet der Psychologie.* (General introduction to the general field of psychology.) Leipzig: Barth, 1928.—W. S. Hunter (Clark).

1764. Baley, S. *Psychologja sensu.* (Psychology of "sense.") *Przegląd filoz.*, 1928, 31, 190-200.—An abstract of a paper read at the Second Polish Philosophical Meeting, Warsaw, 1927. The author discusses the question of "sense" (*Sinn*), distinguishing it from the concepts of purpose and value. It is the task of philosophy to ascertain the concept of "sense." Psychology, however, is interested in the topic because of the fact that the human being has a specific "sense" feel besides the feelings for the beautiful and the good. Reason plays a certain rôle in determining "sense," but the feeling is the basic factor. This feeling varies both in degree and in quality in different individuals and in different epochs.—T. M. Abel (Illinois).

1765. Dallenbach, K. M. On "The Decline of Psychology" in the *American Mercury.* *Amer. J. Psychol.*, 1929, 41, 156-161.—A list of 16 mistakes in statement of fact in the article by Grace Adams which was published in the *American Mercury* for December, 1928.—D. E. Johannsen (Clark).

1766. Dodge, R., & Travis, R. C. A duplex marker. *Amer. J. Psychol.*, 1929, 41, 118-119.—A brief description of a marker that can be used either with ink on paper, or on the smoked surface of a kymograph, though it was first designed for use with a projection chronograph. It writes two non-confusable curves, corresponding to two sets of experimental data, on a single line with a single writing point, thereby guaranteeing perfect alignment and conserving space. It may be wound for either high or low voltage, and may be obtained from the Wesleyan shop for \$35.00.—D. E. Johannsen (Clark).

1767. Dorsey, G. *How and whys of human behavior.* New York: Harper, 1929. Pp. 298. \$3.50.—Some of the problems of everyday psychology are presented and discussed by the author. Among the chapter headings are the following: "Why are we born gamblers?", "How did you get that way?", "How much of your brain do you use?", "Why should you control your emotions?", "How does your job fit you?", "What is wrong with your mind?" The book is an answer to the many queries that followed the publication of the author's last book, *Why We Behave Like Human Beings.*—J. W. Nagge (Clark).

1768. Dunlap, K. The outlook for psychology. *Science*, 1929, 69, 201-207.—The fundamental advances of psychology have been the result of laboratory research. Practical movements which tried to avoid the laborious laboratory method have proven ineffectual and have come to grief. The situation in laboratory psychology, however, is unsatisfactory and inefficient. Little valuable research is being produced. The larger laboratories evidence such impermanence of personnel that a continuous program of research is not carried through. Remedies which are suggested for these conditions include the establishment of a central institute for research, the provision of summer research fellowships, and aid for going research at critical points.—G. J. Rich (Bellevue Hospital).

1769. Evans, C. L. *Recent advances in physiology.* (3d Ed.) Philadelphia: Blakiston, 1928. Pp. xiii + 403.—The author presents a résumé of recent advances in the various fields of physiology and brings the present knowledge of the subject up to date. There are detailed discussions of the present status of excitability and chronaxy, the nerve impulse, the mechanism of postural reflexes and the functions of the labyrinth, conditioned reflexes, endocrinology, and many other fields of physiological research. Each chapter is followed by a bibliography. There are 86 figures and diagrams illustrating apparatuses and methods.—N. L. Munn (Clark).

1770. Fernberger, S. W. Research interests of American psychologists. *Amer. J. Psychol.*, 1929, 41, 163-164.—Members of the American Psychological Association were asked to check the topics in which they were interested as a basis for planning the round table discussions at the meetings. 1,019 topics were checked in all, and they indicated a strong technical interest among psychologists. Problems in sensation and perception stand at the bottom of the list.—D. E. Johannsen (Clark).

1771. Harris, A. J. Analysis: a contribution to psychological method. *Psychol. Rev.*, 1929, 36, 1-12.—Any analysis into observable elements seems to conflict with the facts. Meaningful analysis, aspective analysis, and relational analysis are valid. These three types seem to form a progressive series in any exhaustive treatment of a psychological object. Meaningful analysis is the presentation of the object as immediately experienced. In aspective analysis certain aspects of the object are selected and within them it is possible to carry out relational experiments, giving definite results on the basis of which general laws useful for prediction may be



obtained. There is no conclusive proof of the falsity of analysis into inferential entities for theoretical purposes; but from the pragmatic point of view the recent lack of success of such procedure tends to cast doubts on the validity of this method.—*H. Helson* (Bryn Mawr).

1772. *Heugel, W. Feingelenkprüfer.* (A test for fine movement.) *Indus. Psychotechn.*, 1927, 4, 316-317.—The author briefly describes an apparatus for testing delicate finger movements and gives norms based on 66 subjects.—*A. W. Kornhauser* (Chicago).

1773. *Higginson, G. D. The mirror tachistoscope in the drill laboratory.* *J. Exper. Psychol.*, 1927, 10, 193-194.—Two 75-watt bulbs are arranged in the Dodge tachistoscope so as to illuminate the stimulus object without themselves being seen. The lights are independently controlled and the shift from field to ground can be made very smoothly. By the use of stimulus objects and cards of various colors and brightnesses, many simple visual phenomena can be demonstrated.—*M. N. Crook* (Clark).

1774. *Juhász, A. [Ed.] Magyar pszichologiai szemle.* I. évf., 1-2. szám, July-December, 1928. Pp. 1-158. 16 P. per year, 1-2. szám 8 P.—The first issue of this new organ of the Magyar Pszichologiai Társaság contains a foreword, four original articles (by Ranschburg, Pauler, Várkonyi and Nyirő), remarks by Oláh, Boda and Ranschburg on the Társaság, a book review section (five reviews), some notes, and abstracts in German, French and Italian of the original articles. Kornis and Ranschburg act as consulting editors; the constitution and membership of the Társaság are included. The inversion of personal names should be noted by English readers in search of authors.—*R. R. Willoughby* (Clark).

1775. *Kellogg, W. N. An improved model of McDougall's after-image apparatus.* *Amer. J. Psychol.*, 1929, 41, 119.—A brief description of a revised form of apparatus for studying the travelling after-image. It does away with the necessity of having a dark-room and is so constructed as to avoid having a shadow cast upon the disc by the support for the rotating shaft—a difficulty in McDougall's apparatus.—*D. E. Johannsen* (Clark).

1776. *McGinnis, J. M. A child's stylus maze.* *Amer. J. Psychol.*, 1928, 40, 313.—The maze has the advantage of invisible stops, so that the child need not be blindfolded. It is cheaply constructed out of blocks of vulcanized fiber-board, the grooves being obstructed at appropriate points by hidden bolts.—*E. R. Hilgard* (Yale).

1777. *Meier, H. Zwei neue Apparate für psychologische Untersuchungen.* (Two new apparatuses for psychological investigations.) *Zsch. f. Psychol.*, 1927, 105, 250-258.—Description of two apparatuses to be obtained from Spindler and Hoyer in Göttingen. Both of them permit serial representation of optical stimuli. The first apparatus is to be used in attention, abstraction, reaction and as-

sociation experiments. The second one is chiefly a "memory apparatus for equal and unequal exposure-times."—*H. Klüver* (Institute for Juvenile Research).

1778. *Metfessel, M. A photographic method of measuring pitch.* *Science*, 1928, 68, 430-432.—The photographic and stroboscopic methods of measuring pitch are in a sense combined. A vibrating light passes through the equally spaced apertures of the rows on the stroboscopic disc, being photographed on film at the other side. A slit placed between the vibrating light and the revolving disc permits each flash of light to meet one and only one dot in each row of holes. The film moves, and its rate must be taken into account. The same row on the stroboscopic disc can be used to measure two different frequencies, depending on whether the film is moving in the same or opposite direction to the holes.—*G. J. Rich* (Bellevue Hospital).

1779. *Metfessel, M., & Tiffin, J. A new phonoprojectoscope.* *Amer. J. Psychol.*, 1929, 41, 122.—A description of a device for projecting sonorous wave-motion for visual inspection which is an improvement over the Koenig rotating mirror, because it does away with the loss of light by reason of being reflected only once, and because it is not necessary to have the beam of light strike the reflecting surface at exactly 180° (as was essential in the Koenig instrument if the axis of the wave was not to be changed).—*D. E. Johannsen* (Clark).

1780. *Miles, W. The Victor stroboscopic disk for visual experiments.* *Amer. J. Psychol.*, 1928, 40, 312-313.—Several visual phenomena which can be obtained with the Victor Talking Machine Company's 60-cycle stroboscopic disk for testing the speed of phonograph turntables are described, and the disk is recommended as a standard piece of demonstration equipment.—*M. N. Crook* (Clark).

1781. *Musatti, C. L. L'attività scientifica di Vittorio Benussi.* (The scientific activity of Vittorio Benussi.) *Arch. ital. di psicol.*, 1928, 6, 259-273.—This bibliography of the publications of the late Benussi, edited by Musatti, contains 39 titles. The content of the various articles is briefly summarized.—*H. Klüver* (Institute for Juvenile Research).

1782. *Palmes, F. Psicología.* (Psychology.) Barcelona: Joaquín Horta, 1928. Pp. 432.—This text is divided into three parts. Four chapters are devoted to an introduction. The second part is entitled, "The psychic activity," and is devoted to the presentation and discussion of the facts of mental life resulting from the field of experimental psychology. Some of the topics developed are association, images, sensation, memory, imagination, volition, instinct and habit, etc. The last section is given over to a development of the principal philosophical questions concerning the mental life of man as well as his origin and end. Chapters on the origin of the human soul, the immortality of the human soul, and



the relation between body and mind, are included. The book is limited chiefly to the psychology of man. Psychology is defined as the science of the phenomena of the human soul, their causes and effects.—*J. W. Nagge* (Clark).

1783. **Pauler, A.** *Psychologia és philosophia.* (Psychology and philosophy.) *Magyar pszichológiai szemle*, 1928, 1, 42-51.—Psychology and philosophy are not identical, but complementary; their influence on each other can be mutually stimulating, as when philosophy indicates a program for philosophy or logical theory makes use of psychological data. The author analyzes in this light the heretofore neglected experience of "autothetic" judgment.—*R. R. Willoughby* (Clark).

1784. **Patrick, G. T. W.** *What is the mind?* New York: Macmillan, 1929. Pp. 185. \$2.50.—The book is intended to help the beginner in psychology establish the foundations of a philosophy of mind. In picturing mind as "the late outcome of an age-long course of evolution," the author stresses the theory of emergent evolution and the organismic view of nature.—*L. W. Gellermann* (Clark).

1785. **Pearl R., Richter, C., Miner, J., & Pooler, B. F.** [Eds.] *Human biology, a record of research.* Volume I, No. 1. Baltimore: Warwick & York, 1929.—This new periodical will appear quarterly at a subscription rate of \$5.00 per year. The first number contains six articles, notes, quotations, and a list of recent literature.—*J. C. Spence* (Clark).

1786. **Pillsbury, W. B.** *The cinematoscope as a memory apparatus.* *Amer. J. Psychol.*, 1929, 41, 123.—A method of using the cinematoscope for learning experiments and for class demonstration purposes is described.—*D. E. Johannsen* (Clark).

1787. **Ponzo, M.** *Nota illustrativa di particolari dispositivi e apparecchi usati in ricerche condotte nell' Istituto di Psicologia di Torino.* (Note illustrating special devices and apparatus used in research conducted in the Institute of Psychology in Turin.) *Arch. ital. di psicol.*, 1928, 6, 230-258.—Description of comparatively simple apparatus, most of which has been devised for studying skin sensations. Reference is made to the experimental studies in which the various devices have been used. 28 figures.—*H. Klüver* (Institute for Juvenile Research).

1788. **Ranschburg, P.** *Psychologia és természet-tudomány.* (Psychology and natural science.) *Magyar pszichológiai szemle*, 1928, 1, 9-41.—A consideration of the mind-body relationship, especially as affecting the fields of physiology and psychology; the author feels that phenomena of the psychic order must be admitted to scientific studies as realities equally with more tangible matters.—*R. R. Willoughby* (Clark).

1789. **Rich, G. J.** *The New York meeting of the American Orthopsychiatric Association.* *Amer. J. Psychol.*, 1928, 40, 352.—The meeting in New York

City on February 24th and 25th, 1928, with over 200 psychologists, psychiatrists, and psychiatric social workers in attendance. Topics of sessions and of papers read.—*E. R. Hilgard* (Yale).

1790. **Roberts, W. H.** *Behaviorism, ethics, and Professor Weiss.* *J. Abn. & Soc. Psychol.*, 1928, 23, 393-396.—A rebuke of Weiss for an alleged attempt to mix behaviorism and ethics.—*C. H. Johnson* (Boston Psychopathic Hospital).

1791. **Ruckmick, C. A., & Patterson, E.** *A simple non-polarizing electrode.* *Amer. J. Psychol.*, 1929, 41, 120-121.—The authors describe a finger electrode for use in studying bodily resistances and bodily E.M.F. It is claimed that it fulfills the three desiderata that should apply to electrodes in general: (1) it does not vary the resistance to either ectosomatic or endosomatic current, (2) it is convenient in form and comfortable, and (3) it does not introduce variable electrical components either through battery-effects or through polarization.—*D. E. Johannsen* (Clark).

1792. **Schorn, M.** *Der IV Internationale Kongress für Psychotechnik in Paris.* (The fourth international congress for psychotechnics in Paris.) *Indus. Psychotechn.*, 1927, 4, 344-347.—Brief accounts are given of discussions on: (1) intelligence tests and aptitude tests, including also reports on personality appraisal by Henning, Giese and Stern, and on aptitude for medical work by Marbe; (2) industrial work (reports by Lipmann, Rupp, Ruffer); (3) mental hygiene.—*A. W. Kornhauser* (Chicago).

1793. **Smith, S.** *An optical oscillograph.* *Astro-phys. J.*, 1928, 68, 165-168.—The fact that the polarization of a beam of light traversing a dense medium can be rotated by a magnetic field is utilized in an oscillograph. The arrangement overcomes the limitations imposed by the appreciable mass of the moving parts in mechanical systems.—*C. W. Darrow* (Institute for Juvenile Research).

1794. **Várkonyi, H.** *Az alkatlélektan kifejlődése és jelentősége.* (The evolution of the theory of form (*Gestaltpsychologie*) and its significance in contemporary psychology.) *Magyar pszichológiai szemle*, 1928, 1, 52-88.—The author examines the classical theory of mental operations, and finds it inadequate to the facts. He then presents in detail the *Gestalt* theory, and regards it as superior to the classical doctrines. However, he finds an error of some importance in the value given to form in itself; this, he believes, proceeds from a tendency to base the formulations upon ontologic theory rather than upon experimentally ascertained facts.—*R. R. Willoughby* (Clark).

1795. **von Foerster, J., & Lehmann, H.** *Die VI Tagung der Deutschen praktischen Psychologen.* (The sixth meeting of German practical psychologists.) *Indus. Psychotechn.*, 1928, 5, 94-96; 119-126.—Summaries of reports and discussions are given. Among the topics discussed were: character

tests, types of work curves, traffic signals, analysis of dexterity, factors in manual performance, work with and without time constraint, scale units in psychological measurement, test scores in relation to age and efficiency of workers, automobile accidents, psychotechnical work in the railroads and post office, training of policemen, the work of psychologists as "experts" in legal cases.—A. W. Kornhauser (Chicago).

[See also abstracts 1890, 2050.]

### SENSATION AND PERCEPTION

1796. Allen, F., Archibald, D. C., & Lind, R. A. The coordination of normal and abnormal color vision. *J. Opt. Soc. Amer.*, 1929, 18, 1-16.—An extension is presented of Allen's theoretical views concerning the nervous actions underlying vision. These are the conduction of the impulses from the stimulated receptors by the afferent nerves to the visual centers in the cortex, and the immediate release of enhancing and inhibiting impulses which are conducted by the efferent nerves to the retina where they control the sensitivity of the receptors. Normal vision is the result of a perfect balance of these actions. When the enhancing actions are very weak, or the inhibitory actions strongly developed, color defectiveness or blindness results. When the enhancing activities are predominant, anomalous trichromatic vision is produced. Comparative persistency curves of normal and both kinds of abnormal vision have been obtained by typical observers which the authors believe verify these principles. It thus becomes possible to embrace all types of color vision under one theory of nervous action.—D. B. Judd (Bureau of Standards).

1797. Bart, P. J. Reflections on perception. *New Scholas.*, 1929, 3, 19-23.—Much that we find in philosophy teaches that the senses either deceive us or yield a very distorted view of things. We may grant that it is necessary to allow for the various appearances of objects due to the varying angles and conditions of perception, but even so, if the object does not have a structure and relations which are revealed in the idea, knowledge can have no cognitive value and one cannot even get acquainted with his neighbors. Scholasticism teaches that all things are the product and expression of divine thought. Since the objects of experience are products of thought and commensurate with it, we conceive that we may know them as they are in reality.—J. P. Hylan (Stoneham, Mass.).

1798. Boring, E. G. A new system for the classification of odors. *Amer. J. Psychol.*, 1928, 40, 345-349.—A classification of odors recently worked out by Crocker and Henderson, perfumery chemists, is presented. Four classes are proposed, fragrant, acid, burnt, caprylic. Analysis of data from a large

number of judgments shows surprisingly high agreement between observers, and shows almost as high a degree of accuracy for naïve as for trained observers. It is estimated that 2,000, or possibly even 4,000 different odors can be distinguished most of the time in terms of this system.—M. N. Crook (Clark).

1799. Cobb, P. W., & Moss, F. K. The effect of dark surroundings upon vision. *J. Franklin Inst.*, 1928, 206, 827-840.—The test of vision used was the accuracy with which the subject could keep a manually operated stylus in opposition with another slowly and irregularly moving, mechanically operated stylus. Both of these were seen in silhouette upon a small bright field. The highest precision was obtained with the largest extent of bright surroundings, lowest with the smallest. The extreme difference in precision was from 4.3 to 7.7%. A large part of this difference, 2.8 to 5.6%, occurred when the border of the bright surroundings was pushed outward from 8° to as far as 16° from the visual line. The plotted results would indicate that there is no advantage to be gained by extending the bright surroundings beyond this.—D. B. Judd (Bureau of Standards).

1800. Dembitz, A. Beiträge zur experimentellen Untersuchung der Bewegungswahrnehmung durch das Auge. (Contributions to the experimental investigation of perception of movement through the eye.) *Indus. Psychotechn.*, 1928, 5, 97-110.—The experimental study of the perception of moving objects was undertaken with special reference to practical application in a number of psychotechnical fields. In different experiments the subjects had the following tasks: to adjust the speed of a moving band to agree with a remembered speed; to judge when a mark on the band, after it had disappeared from sight, would reach a given point; to judge when a mark on one band would overtake certain marks on another parallel band moving at a different speed, etc. Brief experiments were also conducted with rotational movement. Among the general conclusions are these: Faster speeds are better judged than slower speeds, apparently because subjects judge in terms of time for a given extent of movement instead of in terms of distance per unit of time. The relation of speed to size of errors is approximately constant—an analogue of the Weber-Fechner law. Individuals seem consciously or unconsciously to adopt the most favorable method for forming their evaluations of comparative speeds.—A. W. Kornhauser (Chicago).

1801. Dimmick, F. L. A reinterpretation of the color-pyramid. *Psychol. Rev.*, 1929, 36, 83-90.—The regular octahedron of Höfler represents most adequately the psychological facts of visual quality except for certain ambiguities which can be solved by the establishment of gray as a principal or unique color quality. The characteristics of the most complex colors can be expressed by an equation of the

form  $x + y + z + g = c$  where  $x$  may be red or green,  $y$  may be blue or yellow,  $z$  may be black or white,  $g$  is gray and  $c$  is the constant of visual intensity. Certain advantages of this equation are pointed out and its implications for theory, Rich's recent theory in particular, are stressed.—*H. Helson* (Bryn Mawr).

1802. **Edmund C.** On the duration of the luminous impression. *Acta Ophth.*, 1928, 6, 414-525.—Description of methods and results from various experiments (by the use of Tscherning's photometric glasses) on visual adaptation: protraction of the image, the protracted duration of impression, time elapsing before protraction is obtained. Footnote references.—*M. L. Reymert* (Wittenberg).

1803. **Ferree, C. E.** Intermittent vision. *Science*, 1928, 68, 645-646.—Movement of the eye, when looking at a rotating object, momentarily interrupts the succession of impressions on any given portion of the retina and the fused components are sensed as separate.—*G. J. Rich* (Bellevue Hospital).

1804. **Fuchs, F.** Experimentelle Studien über das Bewegungsnachbild. (Experimental studies on the after-image of movement.) *Zsch. f. Psychol.*, 1928, 106, 267-315.—The direction of the movement in after-images is dependent not only on the direction of the movement of the stimulus but also on the nature of the field on which the after-image is projected. The influence of the projection-ground is especially great in case it contains perspective drawings. If the ground represents a real object, the movement is to a great extent influenced by our knowledge about the characteristics of the object.—*H. Klüver* (Institute for Juvenile Research).

1805. **Gaehr, P. F., & Packard, R. M.** "An unexplained visual phenomenon." *Science*, 1928, 68, 567-568.—Observations are reported of instances when moving objects are seen in stationary positions.—*G. J. Rich* (Bellevue Hospital).

1806. **Gatti, A.** Di una illusione nel campo delle sensazioni cinestetiche-tattili. (On an illusion in the field of kinesthetic-tactile sensations.) *Arch. ital. di psicol.*, 1927, 6, 40-47.—An optical illusion similar to Zöllner's illusion is studied in the kinesthetic-tactile field. 2 figures.—*H. Klüver* (Institute for Juvenile Research).

1807. **Hillebrand, F.** Kritischer Nachtrag zur Lehre von der Objektruhe bei willkürlichen Blickbewegungen und ihrer Anwendung auf die Stroboskopie. (Critical supplement to the theory of the immobility of objects in the case of voluntary eye-movements and to its application to stroboscopy.) *Zsch. f. Psychol.*, 1927, 105, 43-88.—Deals critically with Wertheimer's objections to Hillebrand's explanation of stroboscopy. Some observations on the behavior of after-images during nystagmic eye-movements are reported. 10 figures.—*H. Klüver* (Institute for Juvenile Research).

1808. **Jaensch, E.** Purkinjesches Phänomen und Rayleighsches Gesetz. (Purkinje phenomenon and Rayleigh's law.) *Zsch. f. Psychol.*, 1928, 106, 222-266.—The Purkinje phenomenon must be considered a phenomenon of adaptation. The differences between the light- and the dark-adapted eye cannot be entirely traced back to differences between rod- and cone-vision. According to Jaensch there has been an adaptation to sunlight on the one hand and to skylight and twilight on the other hand. In the first case, adaptation to the longer wave-lengths and in the second case adaptation to the shorter wave-lengths took place. The brightness distribution of the first case predisposes the eye for form vision; in the second case (Purkinje phenomenon) the visual apparatus is set for "optimal" light reception.—*H. Klüver* (Institute for Juvenile Research).

1809. **Jaensch, E., & Stallmann, W.** Beiträge zur Frage der Funktionsschichten im Sehen mit besonderer Rücksicht auf das Purkinjesche Phänomen. (Contributions to the problem of functional layers in vision, with special reference to the Purkinje phenomenon.) *Zsch. f. Psychol.*, 1928, 106, 129-221.—It is found that the brightness distribution of the Purkinje phenomenon appears in cases of bodily fatigue. This brightness distribution is not due to changes in intensity or adaptation or caused by pupillary changes. The Purkinje phenomenon, however, is less noticeable in case form vision is involved while the person is fatigued. Jaensch assumes that bodily fatigue activates primordial functions and that the appearance of the Purkinje phenomenon under such conditions is a result of functional dissolution (*Abbau*). In the case of form vision, higher and less primitive functions are involved. Hence the Purkinje phenomenon indicative of primordial functions is less noticeable. It reappears entirely whenever higher functions are not dominating, as e.g., in peripheral vision. 12 figures and 30 tables.—*H. Klüver* (Institute for Juvenile Research).

1810. **Judd, D. B.** Least retinal illumination by spectral light required to evoke the "blue arcs of the retina." *Bur. Stand. J. Res.*, 1929, 1, 441-451.—It is shown by these measurements that the retinal rods initiate the nerve activity responsible for the "blue arcs of the retina." The fact that orange-red light serves best to evoke the arcs is ascribed to the fact that little scattered light is present in the eye for this primary stimulus compared to that for stimuli of shorter wave length. It is stated that this result confirms the author's explanation for the Purkinje phase of the periodic after-image (see II: 37), and that it adds support to the theoretical view of Druault and Ladd-Franklin that excited nerve fiber gives off physical light.—*D. B. Judd* (Bureau of Standards).

1811. **Kiesow, F.** Del lucido metallico in immagini cinematografiche. (Metallic luster in cinematographic pictures.) *Arch. ital. di psicol.*, 1928,



6, 225-229.—Kiesow traces metallic luster observed during cinematographic performances back to assimilative processes in the sense of Wundt.—H. Klüver (Institute for Juvenile Research).

1812. Kunze, B. *Die menschliche Wahrnehmung von Geschwindigkeitsänderungen bei horizontaler Progressivbewegung.* (Human perception of changes in speed in the case of horizontal progressive movement.) *Indus. Psychotechn.*, 1928, 5, 65-86.—Each of 34 subjects was tested for his ability to judge changes in the speed of an automobile in which he rode. He was also tested in nine performances believed to be components of the general practical speed-judgment—an optical, an acoustical, and a vibrational component, reaction time, skill, rhythm, and several more complicated processes. Only the auditory test results (judgments of changes in sounds) correlated significantly with the complex practical judgment ( $r=.89$ ). The author cites a number of results of related investigations and gives a bibliography of 69 titles.—A. W. Kornhauser (Chicago).

1813. Lasareff, P. (Lazarev). *Über die Beziehung zwischen der Empfindlichkeit des Auges bei der Wirkung schwelliger Reize und der Sehschärfe.* (On the connection between the sensitivity of the eye for threshold stimuli and visual acuity.) *Zsch. f. Physik*, 48, 437-439.—From the ion theory of visual stimulation, the author derives the formula  $E = KS^2/A$ , where  $E$  is the sensitivity, or reciprocal of the threshold brightness,  $S$  is the visual acuity or reciprocal of the least perceptible visual angle,  $A$  is the least number of cones which will evoke a visual sensation, and  $K$  is a constant. Preliminary observations are in agreement with the formula.—D. B. Judd (Bureau of Standards).

1814. Lowry, E. M. *Some experiments with binocular and monocular vision.* *J. Opt. Soc. Amer.*, 1929, 18, 29-40.—Using a spot (circular, of 50' to 2.5° diam.) surrounded by a field of variable brightness, the author has determined monocularly and binocularly for a number of observers the contrast sensibility as a function of the brightness of the test spot, and for surrounding field brightnesses varying from 0.0005 to 100 ml. It was found that the binocular sensibility was markedly higher than monocular sensibility for brightnesses of the test spot less than 50 ml., but that the use of both eyes brought but little advantage with higher brightnesses. The "brightness of black" (that is, the highest brightness in ml. of one-half of the test spot at which it is indistinguishable from the other half at zero brightness) was determined as a function of the brightness of the surrounding field. The "brightness of black" monocularly determined was found to be higher than that binocularly determined but the difference decreased as the brightness of the surrounding field was increased.—D. B. Judd (Bureau of Standards).

1815. Loy, A. W. *A study of the factors concerned in depth perception.* *Amer. J. Ophth.*, 1929, 12, 108-115.—The sensation of convergence is useful only for relatively gross determinations of depth differences. For more refined distinctions we depend upon the high discriminative powers of the retina acting during diplopia. Convergence plays an important rôle, not as the source of muscular sensation, but (1) by the establishment of a horopter which separates crossed from uncrossed diplopia and (2) by the orientation of corresponding retinal areas relative to seen objects in such fashion that diplopia, crossed and uncrossed, may be most effective in the accurate determination of depth. "Specific nerve energies" are advanced as the basis of fusion and diplopia. 2 full page diagrams.—C. W. Darrow (Institute for Juvenile Research).

1816. Mokre, H. *Über den Einfluss von Grösse und Abstand der Elemente auf die Mengenauffassung.* (On the influence of size and distance of elements on the appreciation of quantities.) *Zsch. f. Psychol.*, 1927, 105, 195-225.—The subjects had to compare two groups of black dots presented successively on white ground. The size and the distance of the dots were varied. 4 graphs and 8 tables.—H. Klüver (Institute for Juvenile Research).

1817. Nafe, J. P. *Dr. Young on trained observers.* *Amer. J. Psychol.*, 1929, 41, 161-162.—An answer to Young's criticism concerning the use of trained observers in certain problems; specifically, in Nafe's study on the affective qualities.—D. E. Johanssen (Clark).

1818. Oesterreich, T. K. *Zum Problem der geometrisch-optischen Täuschungen.* (Concerning the problem of geometrico-optical illusions.) *Zsch. f. Psychol.*, 1928, 105, 371-385.—In phenomenological respect there is no justification for speaking of optical "illusions." The statement that under certain conditions a given line is straight and, again, under certain conditions, is curved is possible only by virtue of the fact that we do not refer exclusively to optical phenomena. We are not justified in identifying "physical nature conceived of in a Euclidean sense and the immediately given, sensory contents of our consciousness." The attempt must be made not to go beyond the facts of perception. "Lines are straight or curved, then, whenever they are straight or curved perceptually."—H. Klüver (Institute for Juvenile Research).

1819. Pikler, J. *Grund und Figur bei schwacher Beleuchtung.* (Ground and figure under weak illumination.) *Zsch. f. Psychol.*, 1928, 106, 316-326.—If the illumination is decreased, figures on a ground become invisible under certain conditions. The color of the ground will fill up the whole field. This filling up will be seen even if the ground consists of certain patterns.—H. Klüver (Institute for Juvenile Research).

1820. Piéron, H. *Excitation lumineuse intermittente et excitation alternante. Caractéristiques et*

lois. (Intermittent and alternate luminous excitation. Characteristics and laws.) *Année psychol.*, 1927, 28, 98-126.—A series of experiments concerning (1) suprafusional intermittences and reinforced addition, (2) suprafusional intermittences and Talbot's law, (3) juxtafusional intermittences and factors which regulate the limit of duration of intermittences, and (4) the characteristics of alternate excitation. It was found that a reduction of a certain amount of light by means of an episcotister, instead of raising the limen, within certain durations lowered it. With brief durations the same quantity of light could attain the limen whether it was continuous or discontinuous. Piéron's results on the second problem seem to substantiate Talbot's law. He finds complete opposition between intermittent stimulation and heterogeneous alternate stimulation, and points out that these two types of stimulation must be subjected to separate study.—N. L. Munn (Clark).

1821. Reyburn, H. A. On the nature of perception. *So. African J. Sci.*, 1928, 25, 485-490.—In a brief exposition the author gives what he believes to be a summary of the essence of structural theories of knowledge and perception. He rejects these in favor of a functional point of view, according to which perception is a mode of behavior, an adaptive response, the special nature of the adaptation being that an orientation to the stimulus, or to the situation containing the stimulus, is taken up largely unconsciously through a mental or cortical set so that one is in a position to allow in one's action for the effect which the object will have. The stimulus is not simply a force acting on the organism—it is a clue upon which one may act, and the extent to which one accepts it as a clue is a measure of one's perception of it. This general conception is briefly applied to the perception of space.—H. F. Verwoerd (Stellenbosch).

1822. Rosenbloom, B. L. Configurational perception of tactual stimuli. *Amer. J. Psychol.*, 1929, 41, 87-90.—An experimental investigation to discover whether or not the principles found by the Gestalt school to govern visual perception are equally applicable to tactual perception. 7 figures were used, 3 complete and 4 incomplete (circle, square, triangle, etc.), and these were applied to the palm of the hand. S's were to draw or describe the figure and to indicate the degree of the certainty of their response. The results show that: (1) the closed figures are more easily perceived than the open figures; (2) the circle and the triangle have the best figure qualities of the 7 used; (3) the open figures tend to be perceived as closed; (4) the figure has properties of its own and influences its component parts.—D. E. Johanssen (Clark).

1823. Soriano, F. J. Diagnostic de la cécité des couleurs. (Diagnosis of color blindness.) *Clin. opht.*, 1928, 17, 319-324.—Reviews the phenomena

of color blindness and points out that in the case of acquired defect, red-green blindness presupposes a lesion of the optic tract while blue-yellow blindness indicates lesion of the sensory epithelium. Only a system similar to Nagel's anomaloscope permits precise investigation. This instrument consists of a tube through which may be seen a luminous circle divided on its horizontal diameter into halves independently variable as to chroma and intensity. When the patient mixes red and green to equal an unsaturated spectral yellow he supplies the data crucial to a correct diagnosis.—C. W. Darrow (Institute for Juvenile Research).

1824. Valentine, W. L., & Gorsuch, C. The effect of suggestion upon the perception of the binaural shift. *J. Comp. Psychol.*, 1928, 8, 361-367.—A study is made of the effect of suggestion in regard to intra- and extra-cranial localization and rotation.—J. W. Nagge (Clark).

1825. Weber, C. O., & Dallenbach, K. M. The properties of space in kinaesthetic fields of force. *Amer. J. Psychol.*, 1929, 41, 95-105.—It has been found in an earlier experiment that the presence of forces against which muscles must act alters the phenomenal experience of spatial extent and temporal intervals. This experiment was undertaken in the hope of obtaining a more complete "geometry" of the "muscle sense." The effect of load on judgments of (1) area, (2) angle, and (3) arc was studied by the method of constant stimulus-differences; stimulus-areas of 5 different sizes were used, the middle one of which served in every case as the standard. The areas were square and the perimeter was traced by the blindfolded S with a stylus which could be weighed; three weights were used. The method for the arc and angle was the same. In every case 25 comparisons were made of the standard and every variable by every S under every one of the 6 experimental conditions. From the changes which were produced in the limens by changes in the size of the outline traced and the load on the stylus with which it was traced, the following generalizations are drawn: (1) A given area sensed under load appears to be phenomenally enlarged. (2) A given angle traversed under load appears to be phenomenally more acute. (3) A given arc traversed under load appears to be phenomenally more sharply curved. (4) As load is increased, critical points are reached where the results due to load are reversed. The results are acknowledged to be tentative, but they suggest that the geometry of the muscles is hyperbolic.—D. E. Johanssen (Clark).

1826. Zietz, K., & Werner, H. Über die dynamische Struktur der Bewegung. (On the dynamic structure of movement.) *Zsch. f. Psychol.*, 1927, 105, 226-248.—It is shown that rhythmically or arhythmically presented auditory stimuli influence the perception of optical movement. Under certain experimental conditions auditory stimulation elicits

optical movement or influences the form of the movement or of the moving object. Movement, as the dynamic change of an object, may, under certain conditions, present itself as optical movement, but its general character may repeat itself in different sensory spheres.—*H. Klüver* (Institute for Juvenile Research).

[See also abstracts 1828, 1846, 1848, 1859, 1868, 1876, 1886, 1891, 1927, 2098.]

### FEELING AND EMOTION

1827. Aveling, F. *Emotion, conation, and will*. In *Feelings and Emotions: The Wittenberg Symposium*. Worcester, Mass.: Clark Univ. Press, 1928. Pp. 49-57.—“Simple introspection, however, is enough to enable us to differentiate qualitatively one feeling state or one emotional state from another, as well as to analyze a number of irreducible phenomena which enter into the constitution of the latter.” The James-Lange theory is accepted on introspective grounds and a distinction is made between the desire and passion experiences in emotion. On the basis of psychogalvanometric experiments the author believes that “will-acts (resolutions, etc., to perform difficult mental or bodily tasks) are both introspectively and objectively different from the conations involved in the actual performance of the tasks. Variation of impulse and of physiological activity are not synchronous, but related as cause and effect.” The following definitions are proposed. A volition, as an act of the self by which we resolve, decide, etc., to do anything, is in essence effortless, and is to be distinguished from a conation, of which it may be the cause. A conation is an experienced act, mental or bodily, or doing. An emotion is a massive and generally wholly unclear experience of cenesthesio-kinesthetic sensation.—*C. Landis* (Behavior Research Fund).

1828. Beebe-Center, J. G. *The law of affective equilibrium*. *Amer. J. Psychol.*, 1929, 41, 54-69.—This paper describes two experiments, the combined results of which show that the affective value of any one member of a sequence of experiences constituting a unitary temporal group is dependent upon the affective values of all preceding members of the group. The purpose of the first experiment described was to determine the difference between the affective values of a set of 21 olfactory stimuli as determined after repeated presentation of the 10 least pleasant members and as determined after repeated presentation of the 10 most pleasant members of the set. In both series the method of paired comparisons was used and both absolute and relative judgments as to the P or U of the odor made. The results show that percentage of pleasantness in the complete series was greater after determination with the unpleasant series than after determination with the pleasant

series. These results may be construed as consequences of either of two hypotheses: the first hypothesis is that the law of affective contrast holds even in the case of successive presentations separated by intervals as great as 2 to 10 days. The second hypothesis is that the tendency toward dynamic equilibrium is operative in the field of affection. For the purpose of determining which of these hypotheses is valid the second experiment was performed. The problem was to ascertain whether the change in affective value of a set of stimuli is distributed evenly over all members of the set, or whether it is confined to members other than those the repeated presentation of which determined the change. The results eliminate the possibility that the results of the preceding experiment were conditioned by a general tendency of olfactory stimuli to become less pleasant as a function of repeated presentation, rather than by the presentation of the determining series. The conclusion is that affection conforms to the following general law: the affective value of the experiential correlate of a stimulus varies conversely with the sum of the affective values of those experiences preceding this correlate which constitute with it a unitary temporal group. In its present formulation the law is somewhat equivocal, but this deficiency is shown to be one which can be remedied by further experimentation.—*D. E. Johannsen* (Clark).

1829. Bentley, M. *Is “emotion” more than a chapter heading?* In *Feelings and Emotions: The Wittenberg Symposium*. Worcester, Mass.: Clark Univ. Press, 1928. Pp. 17-23.—“Is it profitable to psychologize a class of phenomena which we shall agree to call the emotions?” Every comprehensive text of psychology today includes a chapter on emotion, usually made up of sections on classification, expression, the James-Lange theory and the use or control of emotion. A critical examination of this material shows little which represents positive scientific knowledge. Emotion “is something to talk about and to disagree upon. To me its essential characteristic is a progressive activity of the organism when faced by a predicament. . . . But whether emotion is today more than the heading of a chapter, I am still doubtful.”—*C. Landis* (Behavior Research Fund).

1830. Bowman, K. M., & Kasanin, J. *The sugar content of the blood in emotional states*. *Arch. Neur. & Psychiat.*, 1929, 21, 342-362.—Data from outside sources concerning the effect of emotional states on the sugar content of the blood are reported and give contradictory evidence. The data with regard to 148 psychotic patients are equally as contradictory. These patients show a normal distribution curve which agrees essentially with the curve of 431 persons who were clinically normal (Gray). Several hypotheses are given as a possible reason for unincreased blood sugar content in psychotic patients with abnormal emotional states.—*E. C. Whitman* (Boston Psychopathic Hospital).



1831. **Bühler, K.** Displeasure and pleasure in relation to activity. In *Feelings and Emotions: The Wittenberg Symposium*. Worcester, Mass.: Clark Univ. Press, 1928. Pp. 195-199.—The traditional notion is that the direction of behavior is from displeasure to pleasure, from tension to relaxation; Bühler has found from research on the development of behavior of the child that two additional principles must be added. The first he calls *function pleasure* (certain forms of movement are in themselves pleasurable). The second additional principle involves the conception of pleasure in invention or discovery. The pleasure in creative work is the emotional background of intellect and is correlated with it as the function pleasure is correlated with habit formation in the play of the child.—*C. Landis* (Behavior Research Fund).

1832. **Claparède, E.** Feelings and emotions. In *Feelings and Emotions: The Wittenberg Symposium*. Worcester, Mass.: Clark Univ. Press, 1928. Pp. 124-139.—The place of emotion in the various fields of psychological theory is considered. A functional concept of affective phenomena is advanced. This concept states that emotion and feeling are necessary mechanisms by which behavior is best oriented in a useful manner. On the basis of this concept an attempt is made at reconciliation of current theories of emotion. Throughout, the viewpoint of functional psychophysical parallelism is adopted.—*C. Landis* (Behavior Research Fund).

1833. **Dunlap, K.** Emotion as a dynamic background. In *Feelings and Emotions: The Wittenberg Symposium*. Worcester, Mass.: Clark Univ. Press, 1928. Pp. 150-160.—The following definitions are offered. Emotions are experiential visceral and somatic occurrences. Dynamic means having the characteristic of releasing or affecting responses terminating in muscular activity. Background refers to the experienced portion of behavior which is not in the focus of activity. Emotion as a dynamic background (in the sense of these definitions) is then considered with respect to the problems raised, solved or systematized.—*C. Landis* (Behavior Research Fund).

1834. **Howard, D. T.** A functional theory of the emotions. In *Feelings and Emotions: The Wittenberg Symposium*. Worcester, Mass.: Clark Univ. Press, 1928. Pp. 140-149.—"The functional theory would hold, then, that emotion occurs upon the occasion of the disruption of secondary, reconstitutive activities." In the emotional state a blur (confusion of incipient motor reactions) in activity is enlarged, which is noted introspectively as a state of disruption. It is this blurring which causes the difficulty in both introspective and objective studies of emotion.—*C. Landis* (Behavior Research Fund).

1835. **Jastrow, J.** The place of emotion in modern psychology. In *Feelings and Emotions: The Wittenberg Symposium*. Worcester, Mass.: Clark

Univ. Press, 1928. Pp. 24-38.—The place of emotion in modern psychology is considered according to the following scheme: (1) The evolutionary doctrine and particularly Darwin's study of emotional expression. (2) Primitive man and the development of emotional life. (3) The genetic development of the emotional life of the child. (4) Emotions in differential psychology. (5) The abnormal emotions, particularly the psychoneuroses. (6) Emotional-social maladjustment. (7) The socialization of emotion. (8) Freudian psychology of emotion. (9) Experimental organic and psychological studies of emotion. (10) The affective life (including the fine arts) and the theory of interrelation of the world of affect. (11) Emotional hygiene. This article attempts to bring together all of these points in a systematic fashion and to point to the way of future advances.—*C. Landis* (Behavior Research Fund).

1836. **Kiesow, F.** The feeling-tone of sensation. In *Feelings and Emotions: The Wittenberg Symposium*. Worcester, Mass.: Clark Univ. Press, 1928. Pp. 89-103.—A reargument of the controversy concerning the nature of the feeling-tone of sensation. The points emphasized by Wundt, Stumpf, Ziehen, Külpe, and Titchener are considered and compared. The author remains skeptical of the theory that sensations have developed out of feelings.—*C. Landis* (Behavior Research Fund).

1837. **Krueger, F.** The essence of feeling: outline of a systematic theory. In *Feelings and Emotions: The Wittenberg Symposium*. Worcester, Mass.: Clark Univ. Press, 1928. Pp. 58-88.—A systematic statement of the place of feeling and emotion in the Leipzig school of psychology. The presentation is in the form of a closely knit logical demonstration. The author does not summarize his theory further than the outline form of its presentation.—*C. Landis* (Behavior Research Fund).

1838. **McDougall, W.** Emotion and feeling distinguished. In *Feelings and Emotions: The Wittenberg Symposium*. Worcester, Mass.: Clark Univ. Press, 1928. Pp. 200-205.—"We may broadly and consistently distinguish feelings on one hand and emotions on the other by their functional relations to the conative activities which they accompany and qualify, these relations being very different in the two cases." Pleasure is a consequence and sign of success. Pain, the consequent and sign of failure, is frustration. The true emotional qualities are prior to and independent of success and failure.—*C. Landis* (Behavior Research Fund).

1839. **Pillsbury, W. B.** The utility of emotions. In *Feelings and Emotions: The Wittenberg Symposium*. Worcester, Mass.: Clark Univ. Press, 1928. Pp. 116-123.—Emotion has or lacks utility according to the way in which it is defined. In the larger sense all learning and instinct is motivated by emotion. If an analysis of the nature of emotion is made, it may be shown that the only physical accompaniments are

the diffuse neuro-muscular and neuro-glandular discharges, and that little is known concerning the utility of these discharges.—*C. Landis* (Behavior Research Fund).

1840. Prince, M. Can emotion be regarded as energy? In *Feelings and Emotions: The Wittenberg Symposium*. Worcester, Mass.: Clark Univ. Press, 1928. Pp. 161-169.—“Emotions may be conceived as emerging as consciousness out of energy in either of one or two way. (1) They may be discharging complexes of units of energy associated with the electrons of the highly complex atomic structure of the nervous system. . . . (2) We can conceive that kinetic afferent neural energy, being immaterial, becomes transformed into its like, immaterial psychical energy, which in turn, as a link in the chain of events, becomes transformed into immaterial efferent energy, thus conforming to the physical law of the transformation of energy.” The first notion is preferable.—*C. Landis* (Behavior Research Fund).

1841. Seashore, C. E. Phonophotography as a new approach to the psychology of emotion. In *Feelings and Emotions: The Wittenberg Symposium*. Worcester, Mass.: Clark Univ. Press, 1928. Pp. 206-214.—By means of photographic recording of sound or music we may examine the wave form, wave length, wave amplitude and wave recurrence, so obtaining timbre, pitch, intensity and duration of sound. From these records an analysis of the motor mechanism in the expression of emotion, the neural functions conditioning the act, the causes and conditions of emotional responses, the relation of artistic expression to talent, objective differences in the expression of emotional qualities, etc., may be studied in an objective fashion.—*C. Landis* (Behavior Research Fund).

1842. Spearman, C. E. A new method for investigating the springs of action. In *Feelings and Emotions: The Wittenberg Symposium*. Worcester, Mass.: Clark Univ. Press, 1928. Pp. 39-48.—Using the statistical methods of correlation and tetrad differences which have been employed in demonstrating the “g” factor of intelligence, the author shows from the use of tests of desire to excel, desire to impose will, eagerness for admiration, belief in own powers, esteem of self, and offensive manifestations, that a new factor “w” may be set up. This “w” corresponds to decision, desire or emotion.—*C. Landis* (Behavior Research Fund).

1843. Stratton, G. M. Excitement as an undifferentiated emotion. In *Feelings and Emotions: The Wittenberg Symposium*. Worcester, Mass.: Clark Univ. Press, 1928. Pp. 215-221.—Excitement is the response to a situation which we recognize as calling for somewhat more than an easy and routine handling. The situation which arouses excitement may require no adaptation beyond our powers but it does require an adaptation not covered by resources immediately available, and the situation must be recognized as unusual. Such excitement may

stand alone, may be the precursor of any other emotion, may be the successor of other emotions or possibly a constituent of all emotion.—*C. Landis* (Behavior Research Fund).

1844. Washburn, M. F. Emotion and thought: a motor theory of their relations. In *Feelings and Emotions: The Wittenberg Symposium*. Worcester, Mass.: Clark Univ. Press, 1928. Pp. 104-115.—“In what sense, and for what reasons, do emotions paralyze thought; and when and why, if ever, do they aid it? . . . On the motor theory here suggested, emotion interferes with thought only when the movements made in emotion are incompatible with the movements and attitudes essential to thinking. This will be most likely to happen when the energy set free by the glandular processes in emotion discharges into the diffuse and random movements of the motor explosion. Emotion will aid thought when conditions favor the discharge of this energy into the maintenance of a steady innervation of the trunk muscles, which is the basis of introspectively reported feelings of will, determination, activity or effort, and which secures the steady influence of the idea of a goal.”—*C. Landis* (Behavior Research Fund).

1845. Weiss, A. P. Feeling and emotion as forms of behavior. In *Feelings and Emotions: The Wittenberg Symposium*. Worcester, Mass.: Clark Univ. Press, 1928. Pp. 170-192.—What traditionally has been included under the term feeling may be regarded as a literary description of the biological factors of facilitation and interference. The mentalistic point of view has failed to distinguish adequately between sensory facilitation and interference on one hand, and the type of facilitation and interference which may occur between acquired behavior series of long and short duration. From the scientific standpoint feeling is a relatively unimportant category because it does not enter as a causal factor in biosocial adjustment. The biosocial problem of emotion may be regarded from two viewpoints: (1) as the ratio of specific as compared with non-specific movements in the performances of a given task, (2) the relationship between the internal energy-regulating mechanism and biosocial adjustment.—*C. Landis* (Behavior Research Fund).

1846. Wells, F. L. Reaction-times to affects accompanying smell stimuli. *Amer. J. Psychol.*, 1929, 41, 83-86.—Five substances designed to give pleasant, and five designed to give unpleasant odors were used; they were presented in an irregular order and an electric fan was used to dissipate the odor after stimulation. There was no difference between P and U reaction times, although the absolute length was different, ranging between 0.83 and 0.96 sec. for the kymograph method, and between 369 and 905  $\sigma$  by the galvanometer method. In a series testing the reaction to an odor as opposed to no odor, it was found that it took longer to react to a smell as distinguished from no smell than to react to it as P or U. An affective choice time is usually less than a second. In so far as affect may be looked on as a basic factor

in emotion, such findings are opposed to any theory of emotions that refers them to processes having latent times longer than these. This is true of processes on which theories of the James-Lange type depend.—*D. E. Johannsen* (Clark).

[See also abstracts 1764, 1817, 1971, 2058, 2064.]

## ATTENTION, MEMORY AND THOUGHT

1847. **Bergfield, E.** *Die Axiome der Euklidischen Geometrie psychologisch und erkenntnistheoretisch untersucht.* (The axioms of Euclidean geometry psychologically and epistemologically analyzed.) *Neue psychol. Stud.*, 1927, 3, 139-217.—The author attempts to determine the psychological significance of axioms. Are axioms as apodeictically certain as it is generally supposed, or are they subject to the same laws of relativity as all our other experiences? The analysis is based upon the Hilbert axiom system. The author divides it into two groups, the A and B groups. An A-axiom is experienced as a unified simultaneous complex of which the details are known by knowing the whole; a B-axiom, on the other hand, is a succession complex of which the details are experienced one at a time. A-axioms are self-evident; B-axioms become so only through reflection. In A-axioms, the geometric elements are directly communicable, while those of the B-axioms are indirectly so. The conscious aspects of the geometric elements which are termed B-axioms may be experienced only through empirical synthesis; while with the A-axioms consciousness follows as a part of the total situation. The B-axioms do not show the same evidence of apodeixis as the A-axioms, therefore they should not be recognized as true axioms, but should rather be called postulate conventions.—*C. Burri* (Chicago).

1848. **Cooper, S. F.** *The effect of brightness in the range of attention experiment.* *Amer. J. Psychol.*, 1928, 40, 254-274.—The object of this experiment was to determine the effect of brightness of stimulus upon clearness of perception. The method was the statistical calculation of limens for visual apprehension of dots. Three levels of clearness were used, attention, cognition, and apprehension. No constant intensity effect through the three levels was found for any observer. In general, the more intense stimuli were found to have a predominant effectiveness in apprehension, less so in cognition, and least in attention. No constant variation of the coefficients of precision with stimulus intensity was found.—*M. N. Crook* (Clark).

1849. **Crosland, H. R.** *The psychological methods of word-association and reaction-time as tests of deception.* *Univ. Ore. Publ., Psychol. Ser.*, 1929, No. 1. Pp. 104.—The studies reported in this paper find the association method to be quite successful in the detection of guilt. The method has been applied to a total of 55 persons connected with seven different crimes; five instances of stealing, one of cheat-

ing, and one of forgery. A confession was obtained in all instances except the last. The studies were made among dormitory groups, usually upon eight or ten subjects including the chief suspects. The usual method was to escort each subject into the experimental room (in the dormitory) without preliminary notice or under the pretext of furnishing original data for the preparation of a psychology paper. When told the true purpose, none of the subjects refused to proceed. The experimenter with three or four assistants presented 100 stimulus words, 20 of which referred to the intimate details of the criminal act. The word response, the reaction time, and the general behavior of the subject was recorded for each stimulus word. In arriving at decisions of guilt 40 different criteria were employed. All the results of six of the seven studies are presented in detail, including the word responses and the treatment of data under the 40 criteria of guilt. The monograph concludes with a complete history of the association experiments as it has been used since its creation by Francis Galton in 1879. A chronologically arranged bibliography of 161 references is included.—*L. W. Gellermann* (Clark).

1850. **Dallenbach, K. M.** *Dr. Wever on attention and clearness.* *Amer. J. Psychol.*, 1928, 40, 337-342.—A footnote lists the criticisms which have appeared of the Titchenerian doctrine of attention, and the replies made in rebuttal. The criticisms (including Wever's) rest upon misconceptions of the doctrine. Vision is a particularly troublesome sense with which to work, for all four of the "clearnesses" (attributive, cognitive, physiological, and physical) may exist together. Wever's "undifferentiated clearness," resulting from experiments done on the perceptual rather than sensory level, is regarded as a composite.—*E. R. Hilgard* (Yale).

1851. **Ford, A.** *Attention-automatization: an investigation of the transitional nature of mind.* *Amer. J. Psychol.*, 1929, 41, 1-32.—An experimental attack on the problem of what has been called attention was formulated on the basis of several hypotheses. A long historical summary and criticism of the work of earlier investigators furnishes the basis on which these theorems are developed. The problem was to show the changes in efficiency for each successive problem carried on without disrupting the temporal order, both with and without distraction. A record of blood pressure and respiratory changes was taken. The distractors used were an automobile horn and a loud phonograph record, though the latter proved relatively ineffective. 6 problems were worked without distraction, then 6 with constant distraction, and finally 6 more without. The results: (1) the initial reaction is always longer than any other reaction of the period having constant environmental stimulus patterns; (2) there is a tendency for more errors to be committed in the first half of a given homogeneous period than in the second half; (3) writing-pressure and reaction-time



showed a reliable correlation of  $+ .55$ , indicating that new integrations of behavior were accompanied by evidences of general motor tonus; (4) vaso-motor concomitants likewise show initial effects which go through gradient changes as the work continues under constant environmental stimuli; (5) fast workers very rapidly acquire automatization of behavior and show almost an instantaneous recovery after the first problem under noise; slow workers acquire facility only gradually.—*D. E. Johanssen (Clark)*.

1852. **Hanfmann, E.** *Die Entstehung visueller Assoziationen.* (The development of visual associations). *Zsch. f. Psychol.*, 1927, 105, 147-194.—Experiments designed to answer the question whether or not there is association by contiguity with respect to visual objects, such as colors, figures, persons, etc. The presentation of a certain figure does not lead to reproducing another one which has previously been simultaneously or successively presented with this figure for a large number of times. Lacking parts are not recalled if only a part of the figure is presented. The *Aufgabe* to reproduce the figure previously presented with a given figure or to recall the lacking parts is a prerequisite for recall. Such *Aufgabe*, however, is not necessary in case the subject has established a meaningful relation between the objects presented. Cases in which the visual impression alone is sufficient for reproducing the associated object are extremely rare. The author tries to throw light on the difference between visual objects and words as regards association by contiguity. 4 figures.—*H. Klüver (Institute for Juvenile Research)*.

1853. **Henning, R.** *Neue Beobachtungen an einem Fall von abnormen Datengedächtnis.* (New observations on a case with an abnormal memory for dates.) *Zsch. f. Psychol.*, 1928, 106, 107-118.—The author has an extremely well developed memory for years and calendar dates in history. The development of this memory has previously been reported upon in the *Zsch. f. Psychol.* (vols. 10, 55, 90, and 96). In this paper the author reports some new observations on the methods utilized in recalling dates and on the conditions influencing the process of recall.—*H. Klüver (Institute for Juvenile Research)*.

1854. **Martin, P. R., & Fernberger, S. W.** *Improvement in memory span.* *Amer. J. Psychol.*, 1929, 41, 91-94.—This is the report of an experiment made to test the validity of the statement that memory span is a congenital ability, whose limits are fixed at birth. The auditory-vocal memory span for digits was used with two highly intelligent undergraduates; the S's were given a complete series of from 5 digits until they broke down, every day. In the course of 52 learning periods one S improved 47%, while in 57 periods the other improved 36%. The difference between S's seems to lie in the fact that the former more actively attempted various methods of grouping; when the latter also did this then more improvement resulted in his case likewise.

From these results it seems that the grouping process is employed in all memory spans involving more than 5 digits; in the light of the great improvement it would seem doubtful if we are here dealing with an ability whose limits are clearly congenitally fixed.—*D. E. Johanssen (Clark)*.

1855. **Oberly, H. S.** *A comparison of the spans of "attention" and memory.* *Amer. J. Psychol.*, 1928, 40, 295-302.—The thresholds for attention span and memory span were obtained by the method of constant stimuli, the stimuli consisting of series of from 2 to 14 digits, the subject writing the series after presentation, and indicating the grouping of digits by brackets. "Attention span" for most individuals is short enough to cause grouping of units after the number 5 has been passed. The "attention span" limen ranges from 2.5 to 8, while the memory span limen ranges from 6 to 13.5.—*E. R. Hilgard (Yale)*.

1856. **Robinson, E. S.** *Methods of practice equilibration.* *Amer. J. Psychol.*, 1929, 41, 153-156.—An inventory of the methods of practice equilibration for presentation to students in psychology. They are divided into two groups, the method of completed practice and the method of uncompleted practice, the latter being subdivided into the method of predicted learning, method of control group, and methods of counterbalanced order. All are briefly described and the conditions under which each is suitable for use stated.—*D. E. Johanssen (Clark)*.

1857. **Robinson, E. S., & Richardson-Robinson, F.** *A simple series of abilities.* *Amer. J. Psychol.*, 1929, 41, 33-53.—Because of practical application which can be made of the principles of differential psychology when used to study complex processes, little work has been done on the better defined, though more austere, procedures and conceptions. This article describes a study of a series of abilities which have a simplicity and a susceptibility to experimental control conspicuously and almost necessarily absent in applied psychology. Ability is defined as a directly measurable performance. The abilities of 81 S's to copy standard lines of 10 different lengths were measured, and the means, average deviations, and coefficients of correlation between each length and each other one were calculated. When the magnitude of  $r$  is plotted against the length of the line drawn for each standard length, 10 graphs are obtained all showing fundamentally the same thing, i.e., a pronounced dropping in the magnitude of the  $r$  as the lines differ more and more from the given standard. A theoretical discussion of the factors influencing correlation follows; the ideal factor of correlation is a variable condition demonstrably associated with various degrees of correlation. Length difference was such a factor here, and was made to produce an  $r$  of from 0.35 to 0.96, depending upon its own magnitude. Three methods of grouping abilities are discussed, viz., grouping based on equal intercorrelation, grouping based on

possessing more than a stated minimum correlation with some given ability, and grouping by putting into one class all those abilities to which a single law is applicable. The arbitrariness of all these groupings is emphasized. Continuity of variation from ability to ability is the rule.—*D. E. Johanssen (Clark)*.

1858. Skaggs, E. B. Mr. Hovey on distraction. *Amer. J. Psychol.*, 1929, 41, 162-163.—The author holds that the conclusions reached by Hovey in a study on the effects of distraction while working problems from the Army Alpha test are unjustified. (*Amer. J. Psychol.*, 1928, 40, 588. See III: 1455.) A gain of 10.1 points for students working under conditions of quiet on a repetition of the test (another form) is matched for an equated group working under conditions of great noise by a gain of 6.4 points. Hovey concluded that the noise was not a serious handicap, which Skaggs finds unsubstantiated by the results quoted.—*D. E. Johanssen (Clark)*.

1859. Taylor, J. G. A new theory of imagery. *So. African J. Sci.*, 1928, 25, 464-468.—An attempt is made to state what the usual conceptions of imagery are and to raise certain objections against them. The theory then presented is that "images are sensations which are dependent on neural mechanisms that are anatomically indistinguishable from those upon which kinaesthetic sensations depend, but which have nearly the same significance as visual and auditory sensations, that is, they lead to the same kind of adaptive responses, and, therefore, they have nearly the same quality as visual or auditory sensations."—*H. F. Verwoerd (Stellenbosch)*.

1860. Weidauer, F. Zur Syllogistik. (On the syllogism.) *Neue Psychol. Stud.*, 1927, 3, 443-644.—The article contains a discussion of what the syllogism has been, what it is now, and what it ought to be. There are three main parts which, briefly summarized, consist of: (1) a contribution toward a reformation of the syllogism; (2) a representation and criticism of the Aristotelian syllogism; and (3) a presentation of the closure principle as found in the theories of the neo-Aristotelian syllogism. A criticism of this latter view is also given, together with a discussion of the possible further development and application of the syllogism.—*C. Burri (Chicago)*.

1861. Wheeler, R. H. A theory of circuit integration: a criticism of the "centrally aroused process." *Amer. J. Psychol.*, 1928, 40, 525-541.—So perfect has been the correlation between mental and cerebral activities that the possible inadequacy of this fact as a scientific guide to a psychophysical theory has not been adequately inspected; hence the ready acceptance of centrally aroused processes. Therefore, the author sets forth a few suggestions as to a "total integration" theory. Specifically he intends to criticize the notion that the brain functions under certain conditions without peripheral stimulation. First is discussed the problem of cortical localization of function; in the light of modern

research we cannot assume either absolute specificity or absolute generality of the functioning of the cortex. The second problem considered is imagery. At any given time most, if not all, sense organs are functioning and sending sensations to the cortex. Considering these liminal stimuli to be the material from which the nervous system constructs images, all treatment of the brain as a spontaneous creator is avoided. By means of conditioning many other forms of response become supplementary stimuli in the arousal of visual, auditory, and other non-kinesthetic modes of excitation. The explanations which this theory would offer for the "mental set" and its determining tendency, will, attention, affection, and the emotions are mentioned.—*D. E. Johanssen (Clark)*.

1862. Zillig, M. Einstellung und Aussage. (Attitude and Aussage.) *Zsch. f. Psychol.*, 1928, 106, 58-106.—Experiments on children and adults to determine the ways the Aussage is unintentionally influenced by sympathies and antipathies, by the party bias of the individual. It is found that "the best psychic state for a strongly decreased efficacy of unintentional party-bias appears to be a combination of superior intelligence with weak affectivity." The Aussage is less falsified in case of simple objects and in cases wherein the subject is thoroughly familiar with the object. There is a discussion of the practical importance of the findings.—*H. Klüver (Institute for Juvenile Research)*.

[See also abstracts 1871, 2003, 2112.]

## NERVOUS SYSTEM

1863. Fleisch, A. Erregbarkeitsänderung des Atmungszentrums durch Schlaf. (Alteration of the excitability of the respiratory center by sleep.) *Pflüg. Arch. f. d. ges. Physiol.*, 1929, 221, 378-385.—Increase in respiratory activity produced by reducing atmospheric pressure to 330 mm. is promptly destroyed with the onset of sleep. The depressive effect of sleep is observable in the respiration under normal pressure conditions, but is very slight. The effect of the sleeping state is manifest within 4 sec. after its onset and disappears within 4 sec. after waking. The influence of a cortical factor in cooperation with the hydrogen ion concentration in the respiratory center is suggested.—*L. T. Spencer (Yale)*.

1864. Langworthy, O. R. A correlated study of the development of reflex activity in fetal and young kittens and the myelinization of tracts in the nervous system. *Carnegie Inst. Contrib. Embryol.*, 1929, 20, 127-172.—The myelinization of the central nervous system of kittens from the fetal stage to the 57th day was followed while at the same time the reflex responses of these animals to various stimuli were observed. The fetal kittens were delivered one at a time from the exposed uterus of a

decerebrate cat. In an appropriate solution typical reflex responses were noted, such as the withdrawal of the foot from mechanical stimulation, the scratch reflex, etc. The animals were then killed and the brain-stem and spinal cords were fixed, embedded, and stained by the Pal-Weigert method to illustrate the stage of medullation of the nerve tracts. Several animals from less than one day old to 57 days were also studied and the preparations were made in a similar manner. Medullated fibers were found in the spinal cord of the youngest animals and the behavior of these animals seems to have been correlated with the myelination of the reflex arcs. While the data seem to suggest that the functioning of the reflex arcs is dependent upon myelination, Langworthy does not care to hazard an opinion in the absence of further data. His data do show that the ventral spinal roots myelinate before the dorsal. He says, furthermore, that "Myelination occurs first in the cervical portion of the cord and proceeds in a caudal direction. In the brain-stem the vestibular nerve and its connections (including the vestibulo-spinal tract) and the medial longitudinal fasciculus become medullated early. The vestibular and spino-cerebellar fibers early reach the cerebellum; other cerebellar connections are slow in receiving their myelin sheath. The posterior column fibers of the cord also myelinate slowly; the cuneatus fibers are medullated earlier than the gracilis. The cortico-spinal fibers first take the myelin stain about two weeks after birth." The author believes that "there is no good evidence for a center in the thalamus having exclusive control over coordinated progressive movements of the extremities of the cat." The spinal cord, he believes, can control these movements without cerebral influence. A correlation of reflex activity with medullation shows that bilateral movements of the extremities begin to coordinate when the ventral commissural fibers of the cord myelinate. Turning of the body takes place when the myelinated vestibular fibers reach the cord. Movements of the hind-legs are better coordinated as the myelination becomes marked in the lumbar portion of the cord, etc. 9 plates, comprising 84 sections, and a bibliography of 94 titles are appended. The author's results throughout are discussed in relation to previous researches.—N. L. Munn (Clark).

1865. Lasareff, P. (Lazarev), & Pavlov, P. *Über Anwendung des Nernstschen Gesetzes der Reizung auf die hemmende Wirkung der Nerven.* (On the application of the Nernst law of stimulation to the inhibitory action of nerves.) *Zsch. f. Physik*, 1928, 51, 842-843.—The authors have shown that the

Nernst square root law of excitation  $\frac{a}{\sqrt{N}} = K$ ,

$a$  being the amplitude and  $N$  the frequency of alteration of the current, holds not only for the excitatory nerves but also for the inhibitory action of the vagus nerve on the heart muscles.—D. B. Judd (Bureau of Standards).

1866. MacDonald, A. *El peso del cerebro y la inteligencia en le hombre.* (The weight of the brain and intelligence in man.) *Rev. de crim. psiq. y med. leg.*, 1927.—The author aims to support the theory of the correlation between intelligence and the weight of the brain. His statistics include 100 famous personages and 89 members of the 69th U. S. Congress. The average weight of the brains of congressmen is 1,450 gr., that of senators being higher than that of representatives.—R. E. Schwarz (New York University).

1867. MacDonald, A. *Brain.* *Med. Times*, 1928, 3-14.—A compilation of measurements of brain weight of ancient and modern man, various animals; brain weight according to age, occupation, size of head, and cranial capacity; and of the earlier views of cerebral localization. Modified Lee-Pearson formulae are given for estimating the brain weight from measurements of the size of the head. The material is summarized in a conclusion of 57 items.—O. W. Richards (Clark).

1868. Marquez, M. *Mi esquema sobre las vias del reflejo pupilar a la luz.* (My scheme regarding the tracts of the pupillary reflex to light.) *Rev. oto-neur.-oftal.*, 1928, 3, 525-539.—The author discusses some of the shortcomings of previous theories regarding the course of the tracts of the pupillary fibers involved in the reflex to light. He states that the fibers arising from each eye reunite in the geniculate body of its side, also that almost all of the fibers proceeding from the retina of the other side arrive there too. However, he notes that the fibers arrive independently from each nucleus. Two important facts explain the peculiarities and the apparent paradoxes of some pathological cases: first, the predominance of crossed fibers in the chiasma, and, second, the fact that the fibers are crossed again in an inverse manner in the intermediate neurone in order to go to the geniculate body of the corresponding eye. The fibers proceeding from the nasal sides of the eyes are crossed only once in the chiasma while the pupillary fibers in relation to those that proceed from the corresponding parts of the retinas undergo a double semi-decussation in the intermediate neurone.—J. W. Nagge (Clark).

1869. Papez, J. W. *Comparative neurology.* New York: Crowell, 1929. Pp. xxv + 518.—An introduction to vertebrate neurology for students of psychology, physiology and biology. The first section deals with the gross anatomy of the mammalian brain, the second with the microscopic structure of the mammalian nervous system, while the final section is a comparison of the nervous systems of various vertebrates. There are 315 illustrations and many references at the conclusion of each chapter. The text is arranged to accompany a laboratory course in comparative neurology.—N. L. Munn (Clark).

1870. Spiegel, G. *Der Einfluss des vegetativen Nervensystems (besonders der Vasomotoren) auf*



**die Funktion des Innenohres.** (The influence of the vegetative nervous system, especially the vasomotor, on the function of the inner ear.) *Rev. oto-neuro-oftal.*, 1929, 4, 19-26.—The author discusses the influence of the vegetative nervous system on the functioning of the inner ear. The effects of the contractions of the arteries, of the permeability of the vascular walls, and of the oscillations of blood pressure on the inner ear in its functioning are discussed. Despite the experimental work at hand the author believes it wise to exercise caution in accepting some of the audacious deductions which have been made concerning the influence of vasomotor disturbances on the function of the internal ear.—*J. W. Nagge* (Clark).

[See also abstracts 1769, 1872.]

#### MOTOR PHENOMENA AND ACTION

1871. **Bunch, M. E.** The effect of electric shock as punishment for errors in human maze-learning. *J. Comp. Psychol.*, 1928, 8, 343-359.—The effect of a definite intensity of electric shock was studied when given as punishment for error in maze learning. The subjects were adult human beings. A stylus maze was used and so constructed that a shock was given the subject when the stylus came in contact with the end of a blind alley. One group learned the maze without punishment while the other learned with shock as punishment for error. The problem was mastered at one sitting. With the electric shock used the maze was learned in a lesser number of trials, less total time, and with fewer errors of all types recorded. The time per trial was increased when the shock was used as punishment in the cul-de-sac.—*J. W. Nagge* (Clark).

1872. **de Juan, P.** Sur les réflexes oculaires provoqués par l'aspiration et la compression pneumatiques du contenu des canaux semi-circulaires et de l'utricule chez le lapin. (Ocular reflexes evoked by pneumatic aspiration and compression of the contents of the semi-circular canals and utricle of the rabbit.) *Trav. d. lab. d. rech. biol. d. l'Univ. d. Madrid*, 1928, 25, 307-318.—Direct observation showed complicated ocular movements evoked by both compression and aspiration. Results are discussed in reference to observation of others, especially those of de Nô. Bibliography.—*R. Dodge* (Yale).

1873. **Fletcher, J. M.** An old solution of the new problem of instinct. *Psychol. Rev.*, 1929, 36, 44-55.—The lapsed intelligence or theory of lapsed conscious control is rendered plausible by assuming that in the earlier forms of life animal protoplasm was of such character as to make possible the transference of effects of individual experiences to offspring; but with the increase of differentiation of structure and specialization of function the hereditary transmission of such effects became increasingly difficult

and increasingly dysgenic, in that it involved the inheritance of the effects of losses and mutilations, which are the more serious the more highly complicated the organism. Hence, through selection, there must have begun in the phylum a tendency toward the disappearance of this characteristic, so that we may say that the Lamarckian hypothesis holds true when applied to the lower or older end of the phyletic series, and Weismannism becomes more and more strictly applicable to the conditions found to exist in the more highly differentiated structures of recent life forms. Recent experiments with colon bacilli furnish experimental proof of this hypothesis.—*H. Helson* (Bryn Mawr).

1874. **Johnson, H. M.** The real meaning of fatigue. *Harpers*, 1929, 158, 187-193.—A description of what takes place in fatigue. Attention is called to the fact that the state is similar to asphyxiation or narcosis (alcohol, coffee, drugs) in that all produce exhilaration in the early stages, a desire to continue the state, and collapse as an end result. Fatigue is described as a system of manufacturing alcohol within the body, the results being similar to ingesting alcohol.—*J. R. Liggett* (California, at Los Angeles).

1875. **Kenyon, E. L.** Action and control of the peripheral organs of speech. *J. Amer. Med. Asso.*, 1928, 91, 1,341-1,346.—The function of speech and voice production is dependent upon the control of a complex anatomico-physiological mechanism in the movements required for talking. Three independently controllable systems of muscles are required for speech. The muscles of the chest are under direct conscious control. The oro-laryngeal system of muscles determines the manner in which the air pressure from the chest will be utilized for sound production. It acts in well defined segments of effort. First, the mouth mold is created. Then, under the guidance of the mental picture of the sound to be produced, the oro-extrinsic musculature is set into operation. Finally, the intrinsic laryngeal musculature is released into the action that determines vocal cord position. Normal voice requires steady, adequate air pressure against the vocal cords, coupled with unhampered action of the intrinsic laryngeal muscles. Psychologically, each muscular act demanded by the functions of voice and speech is consciously controllable, is susceptible of being produced with accuracy, and is susceptible of much conscious elaboration.—*G. J. Rich* (Bellevue Hospital).

1876. **Kleint, H.** Reaktionen auf erlöschende Lichter. (Reactions to the disappearance of lights.) *Indus. Psychotechn.*, 1928, 5, 28-29.—Under several sets of conditions, reactions to the disappearance of a light were a little faster than reactions to the coming on of the light. Hence the extinguishing of lights may well be used for signalling purposes.—*A. W. Kornhauser* (Chicago).

1877. **Loiselet, —.** Quelques récents travaux sur l'adrénaline. (Some recent work on adrenalin.) *Clin. opht.*, 1928, 17, 537-540.—Reviews the physio-

logical action and therapeutic uses of adrenalin.—*C. W. Darrow* (Institute for Juvenile Research).

1878. *Orton, S. T., & Travis, L. E. Studies in stuttering: studies of action currents in stutterers. Arch. Neur. & Psychiat., 1929, 21, 61-68.*—When the currents from both forearms are recorded during simultaneous voluntary contractions, they may appear simultaneously in the two arms, but in by far the greater number of trials the action currents from one arm precede those from the other by a short interval. In records of right-handed normal speakers, the number of times that the action currents precede in the right arm far exceeds the precedence in the left, and also far exceeds the incidence of the simultaneous leads. In "right-handed" stutterers, the greatest number of leads is in the left arm and the number of simultaneous leads is much greater than in the normal speakers.—*E. C. Whitman* (Boston Psychopathic Hospital).

1879. *Pollock, L. J., & Davis, L. Muscle tone: extensibility of muscles in decerebrate rigidity. Arch. Neur. & Psychiat., 1929, 21, 19-36.*—The extensibility of a muscle intoned by a tonic reflex is due to a peculiar physical property of such a muscle. This property may be an intermediate state of muscle contraction analogous to gum, or a state of elastic contraction analogous to rubber. The opposing muscle is dependent on the integrity of the posterior roots for the property of shortening to accommodate to the lengthening of the agonist, with a proper adjustment to new length and load against which it works.—*E. C. Whitman* (Boston Psychopathic Hospital).

1880. *Ponzo, M. Significato e finalità di manifestazioni motorie in stati di attività psichica.* (Meaning and finality of motor manifestations in states of psychic activity.) *Arch. ital. di psicol., 1927, 6, 1-39.*—The assumption that there exists a direct relation between psychic activity and respiration must be considered erroneous. The respiratory changes which occur while attending to visual, auditory, olfactory, etc., stimuli are explainable by reference to the particular aim of the sensory activity in question. Thus the modification of the respiratory rhythm while attending to odoriferous substances will be different from the respiratory change while listening to faint noises. During mental activity the inspiration-expiration ratio is smaller than in the phase preceding such kinds of activity. The same lengthening of the expiratory period is found during the verbal expression of thoughts. The fact that the decrease of the respiratory quotient is also found in the period following mental activity is considered an instance of "psychic-motor perseveration." There are kinds of mental activity in which verbal symbols are not utilized but which nevertheless show a decrease of the respiratory quotient. This is explained by the tendency to diffuse and generalize a motor respiratory-phonetic disposition. The author

considers the importance of his findings for general and differential psychology. He arrives at the theory that the different respiratory modifications are best understood by assuming that they facilitate processes of perception or thinking or phonetic reactions, in short, the reaching of certain ends in mental life. 8 figures and 6 tables.—*H. Klüver* (Institute for Juvenile Research).

1881. *Swift, E. J. The learning process: a criticism and a theory. Psychol. Rev., 1929, 36, 27-43.*—Criticism of several theories of learning, after which author's theory is proposed that in all animals a neural tension is produced by stimulation of receptive centers through a sense organ. This neural tension, or subexcitation, forms functionally operative neural patterns corresponding to the objective patterns to which the animal reacts, and these neural patterns are retained. In this theory no anthropomorphic assumptions are made involving such concepts as consciousness, images, and the like. Illustrations of the theory are given as applied to human and animal learning.—*H. Helson* (Bryn Mawr).

1882. *Travis, L. E. Recurrence of stuttering following shift from normal to mirror writing. Arch. Neur. & Psychiat., 1929, 21, 386-391.*—A report of a case of a student with a writing disability who after four days of mirror writing developed stuttering and confusion in the orientation of certain letters. During the second month of this shift from normal to mirror writing, the stuttering disappeared. The author feels that this disturbance of speech was not due to any emotional factor but rather to a conflict between the two hemispheres of the brain comparable to that which occurs when right-handed writing is forced on a left-handed child.—*E. C. Whitman* (Boston Psychopathic Hospital).

[See also abstracts 1769, 1772, 1830, 1846, 1849, 1851, 1868, 2052, 2110.]

#### PLANT AND ANIMAL BEHAVIOR

1883. *Bingham, H. C. Sex development in apes. Comp. Psychol. Monog., 1928, 5, No. 1. Pp. 165.*—The monograph comprises a description of the external genitalia of anthropoid apes, cross-section studies of the copulatory behavior of primates in the Abreu colony in Havana, a genetic study of copulatory behavior in the chimpanzees of the Yale Institute of Psychology, and descriptions of non-reproductive sexual behavior in primates. The studies show that the fundamental characteristics of copulatory behavior manifest themselves long before reproductive maturity is reached. Greater uniformity of reproductive behavior among monkeys than among apes is suggested. The author believes that a "further study of sexual ontogeny will reveal increasing variability in mutual adjustments as the subjects respectively represent monkeys, apes, and man." Variability and experience were shown to be

outstanding factors in the sexual adjustment of apes. Copulatory play was witnessed in the activity of immature chimpanzees. The author finds that, contrary to the reports of previous observers, ventroventral adjustments are frequently made and that intromission is possible from this position. Various types of homosexual and masturbatory responses are reported. Social stimulation seemed to accentuate sexual activity and particularly exhibitionism. Vision and contact are believed by the author to be the dominating factors in the initiation of sexual behavior, although there is evidence to show that smell, taste and hearing may play a supplementary rôle. The author stresses the value of such primate studies as have been carried on in the Yale laboratory since it is impossible to obtain detailed information on the development of sexual behavior in humans. Bibliography of 33 titles.—*N. L. Munn (Clark)*.

1884. Bingham, H. C. Chimpanzee translocation by means of boxes. *Comp. Psychol. Monog.*, 1929, 5, No. 3. Pp. 91.—Using standardized boxes and controlled experimental conditions, the author investigated the ability of the four Yale chimpanzees to reach a suspended "lure," in the shape of bananas, oranges, etc., by stacking or up-ending boxes. Placement of one cube, stacking of two boxes, up-ending a box of two dimensions, stacking of three boxes, roundabout box translocation, and up-ending plus stacking were solved by all four subjects, while four-box stacking and up-ending on one cube was solved by only two subjects. The cubes and boxes of two dimensions were of describable size and weight, and were made in accordance with the physical characteristics of the subjects. They were also placed in describable locations before each trial. Each trial consisted of a 10-minute period. The results and details of each experimental situation are summarized in a number of tables. The results seem to indicate that the use of the long dimension of a box is more easily accomplished than the stacking of two cubes. The author suspects that up-ending an object is "generally easier for anthropoid subjects, as an initial problem, than stacking . . ." But he suggests that further data from subjects having a different social background should be forthcoming before such a generalization is accepted. "The evidence favors the conclusion that initial stacking adjustments were observed." The performances which appeared mechanistic were differentiated from those which seemed to involve definite planning on the part of the chimpanzee. Various criteria for these two types of activity are given. The author believes that "Evidence obtained from this study and supported by other observations suggests that insight involves little, if any, behavior that is strictly new. More likely, it is represented by behavior composed of responsive factors which have been combined, perhaps practiced, in other fusions. The adaptive novelty in insight behavior is probably to be found in the new focus of response units rather

than in the introduction as such of new response factors." Bibliography.—*N. L. Munn (Clark)*.

1885. Clements, F. E. The effect of time on distance discrimination in the albino rat. *J. Comp. Psychol.*, 1928, 8, 317-324.—An asymmetrical T-shaped apparatus with paths giving a distance ratio of 1:10 was constructed in such a manner that the rat could be detained for varying lengths of time immediately after making a choice. The detention chambers, one on each side of the choice point, were of equal dimensions. One group of rats were allowed to make their choice of either alley and continue without delay while the other three groups were delayed for 30 seconds, 60 seconds, and 120 seconds respectively. The aim of the experiment was to determine if the time spent in running the pathway was as effective as time spent in waiting. The results show that without a delay learning begins immediately and proceeds rapidly, the curve being similar to "insight" curves. But when a time interval exists between the moment of choice and the continuation of the path to food learning does not commence immediately. "For several days each animal apparently learns nothing, his choice of path seeming due to chance. Suddenly, however, he begins to learn and from that point on his learning proceeds at approximately the same rate as that of those animals where there was no detention. The longer the detention the longer the initial period of no apparent progress. If the detention is long enough . . . the animals are probably unable ever to make the discrimination." The group which had been delayed 120 seconds ran for 25 days with no signs of learning to discriminate the shorter path. On the 26th day the detention was removed for three of these rats, whereupon they learned it in much shorter time than the animals with no detention and no previous acquaintance with the apparatus. In explanation the author says, "The longer the detention the longer it takes the rat to 'get the idea' until, with a long enough detention, the animal's memory is perhaps not long enough to span the gap between turning a particular way and the 'realization' of the preferential character (shortness) of that way."—*N. L. Munn (Clark)*.

1886. Engelmann, W. Untersuchungen über die Schalllokalisation bei Tieren. (Investigations on sound localization in animals.) *Zsch. f. Psychol.*, 1928, 105, 317-370.—Experiments on sound localization in dogs, cats, and chickens. Cardboard screens were placed either before the animal or in a circle or at different distances and heights. A buzzer was sounded behind one of the screens. The dogs were found to be far superior to man in distinguishing directions acoustically. They underestimated distances. Some of the experiments on dogs were carried on under decreased illumination or in the dark room. As regards right-left localization it was found that the dogs were superior to chickens and inferior to cats.—*H. Klüver (Institute for Juvenile Research)*.



1887. Gengerelli, J. A. The effect of rotating the maze on the performance of the hooded rat. *J. Comp. Psychol.*, 1928, 8, 377-384.—In this experiment, the author, using two different mazes, studied the effect of rotating the maze on the performance of 8 "hooded" rats. The mazes were of simple design. The results obtained stand in striking contrast to those of Watson, for practically no disturbance in behavior resulted with rotation. Analysis of the data convinces the author that the rats were not in the least guided by olfactory sensibility.—C. H. Graham (Clark).

1888. Gengerelli, J. A. Preliminary experiments on the causal factors in animal learning. *J. Comp. Psychol.*, 1928, 8, 435-457.—The author reports a long list of experiments performed with rats in variations of a simple maze. The analysis of the data convinces the author that the current concepts of frequency and recency in learning are inadequate and erroneous, as is also the chain-reflex notion.—C. H. Graham (Clark).

1889. Henning, H. Zur Psychologie der höheren Säugetiere. (On the psychology of higher mammals.) *Zsch. f. Psychol.*, 1928, 105, 273-301.—Present investigations in animal psychology seem to indicate that the normal reactions of the animals are "errors." Henning thinks that we should not teach the animal what it cannot do, but learn from the animal what it can do. The same apparatus or method cannot be used "from the mouse to the elephant." Since the apparatus remains only "the same" in physical, but not in psychological or biological respects, results obtained on differently organized animals are not comparable. "Most apparatus do not take into account the environment of the animal or at least nature, but reflect the mechanic and engineer." Topics such as Köhler's "misunderstanding of the psychology of apes," "development factors," and "training effects without training," etc., are discussed. The author considers it strange that the most unimportant psychological dissertations are everywhere quoted, whereas the really important observations of directors of zoological gardens and of animal-breeders are totally neglected in psychology.—H. Klüver (Institute for Juvenile Research).

1890. Huang, L. An analysis of the maze technique. *J. Comp. Psychol.*, 1928, 8, 301-311.—Various types of mazes are studied and an analysis of patterns, types of blinds, and the effect of these upon learning are discussed. Mazers in use at present show a great lack of comparability because they possess an "indiscriminate mixture of blinds varying widely in difficulty." Bibliography of 36 titles.—N. L. Munn (Clark).

1891. Johnson, G. L. Contributions to the comparative anatomy of the reptilian and amphibian eye, chiefly based on ophthalmological examination. *Phil. Trans. Roy. Soc. (B)*, 215, 315-353. (Abstract by Woods, C. A., *Arch. Ophth.*, 1928, 57, 553-560.)

—Many significant facts are recounted by the reviewer concerning reptilian and amphibian eyes, such as sex dimorphism in eye color of the turtle, the presence of lateral movement of the lens in reptiles and the lack of it in amphibians, and the fact that amphibians are without maculae or foveae.—C. W. Darrow (Institute for Juvenile Research).

1892. Roberts, W. H. A note on anthropomorphism. *Psychol. Rev.*, 1929, 36, 95-96.—When a "scientific" method necessitates the description of human conduct in sub-human terms, it exhibits its own absurdity.—H. Helson (Bryn Mawr).

1893. Valentine, W. "Visual perception in the white rat." *J. Comp. Psychol.*, 1928, 8, 369-375.—The work of Higginson as reported in a previous article of the title quoted is repeated. The rats used in this earlier work were reported to have demonstrated the ability of sudden adjustment. This took place at once when a sliding door was opened in the course of the usual path to the food box. The first time the door was opened the rats did not follow their usual path but immediately chose this shorter way to the food, thereby eliminating a long stretch of cul-de-sac. Of the 19 rats used by the author in a repetition of the work by Higginson, only 4 ran through the newly opened pathway on the first trial after it was opened, while 15 ran past the doorway in the usual fashion before retracing to it. The rats used did not display the ability of sudden adjustment on this first "critical run" as did those of Higginson.—J. W. Nagge (Clark).

1894. Warden, C. J., & Nissen, H. W. An experimental analysis of the obstruction method of measuring animal drives. *J. Comp. Psychol.*, 1928, 8, 325-342.—An attempt is made at the determination of the accuracy of the standardized obstruction method in giving a valid measure of drive-incentive behavior in the white rat. The obstruction or shock and the incentive arrangements are tested in order to test the influence of each in the measurement of drive behavior. The positive and negative factors of incentive and obstruction are so interlaced that it is difficult to evaluate them satisfactorily when isolated. The result of practice on retested groups at stated intervals and the validity of the method in the study of individual differences in drive are examined. The method seems to have a high validity in the light of the records of crossings of the animals in the tests and retests. The authors also hope to standardize and adapt the apparatus to the use of other animals than the albino rat.—J. W. Nagge (Clark).

1895. Warner, L. H. A study of hunger behavior in the white rat by means of the obstruction method. Comparison of sex and hunger behavior. *J. Comp. Psychol.*, 1928, 8, 273-299.—Using the same obstruction apparatus and strain of rats, the author has extended his researches on animal drives to a study of hunger behavior and has made a comparison of this and the sex data previously pub-

lished. Comparable groups of animals of both sexes were deprived of food for 0, 2, 3, 4, 6, and 8 days respectively and the strength of the hunger drive was, as in the sex experiments, determined by the number of times an animal would cross an electric grid to reach the stimulus during a 20-minute test period. The only difference between this experiment and the previous one was in respect to the stimulus, food being the incentive in this case. Resulting data shows (1) that "the tendency of the male white rat to approach food . . . is at its low point when the animal is tested immediately after being removed from a cage containing food. This tendency increases with an increase in the length of the starvation period up to a period of four days, and from this point on decreases. (2) In the female rat this tendency reaches its high point much earlier. The tendency after one day of starvation is apparently almost as strong as it is in the male after a four-day period of starvation. After one day of starvation the tendency in the female declines gradually and then more rapidly, never after the second day being as strong as in the male. (3) Comparison of the groups which, of those tested, represent the hunger and sex drives at their maximum, indicates that the tendency of the white rat to approach a food object is stronger than its tendency to approach a sex object. This is true of rats of both sexes although the difference is not so great in the case of the female." There is an historical treatment of hunger behavior and a comparison of the present results with those of previous investigators. Bibliography.—N. L. Munn (Clark).

1896. Woodrow, H. Temporal discrimination in the monkey. *J. Comp. Psychol.*, 1928, 8, 395-427.—Two monkeys were taught to differentiate between temporal intervals of 1.5 and 4.5 seconds. The monkeys were taught to reach for food, upon the raising of the screen, after the longer interval, but not after the shorter interval. Over 2,600 trials were given to each animal. On the last day of training responses were 90% correct. Learning curves plotted in terms of measurements of the differences in behavior elicited by the two stimuli are advocated as more accurate than curves which show simply the change in the total number of errors. Speed of reaching afforded supplementary proof of learning. Frequency of reaching showed reliable differences. Both animals showed transference of training in discriminating between 1.5 seconds and 4.5 seconds to the task of discriminating between intervals of 1.5 and 3.0 seconds. Results of an experiment designed to test for the threshold showed that 75% correct responses could be obtained for both monkeys when the interval to be distinguished from the standard one of 1.5 seconds was 2.18 seconds. If the difference in the number of reaches is used as the criterion this threshold is much lower. A delay of 3.0 seconds between the stimulus-interval and the raising of the screen to permit response reduced the cor-

rectness of the discriminations below 75%. Notes on the types of behavior exhibited by the animals were taken at frequent stages of the experiment.—C. H. Graham (Clark).

1897. Yerkes, R. M. The mind of a gorilla. Part III. Memory. *Comp. Psychol. Monog.*, 1928, 5, No. 2. Pp. 92.—A continuance of work done with Congo, the previous reports of which appeared in Vol. 2 of *Genetic Psychology Monographs* (see I: 1,110; III: 1,496). Several behavioral adaptations involving "reproductive imaginations" or "memory" are reported. The animal showed unmistakable signs of having visually recognized the experimenter after an absence of 10 months. Several problems solved 10 to 11 months previously were remembered, as were various features of the experimental situation. "Acquired adaptations to such mechanisms as hooks, snaps and padlocks persisted, but increase in mechanical ability was not indicated." A new type of delayed reaction problem was undertaken and it was shown that the animal could delay its reaction successfully for ten minutes. The apparatus was a turn-table mechanism carrying a number of different colored or different shaped receptacles. After the animal had watched the experimenter place food in one of the receptacles situated in front of its cage close to a grill the turn-table was rotated from 90° to 270°. Following the interpolated period during which the animal was at liberty in her cage, she came to the grill and rotated the table until the correct can came within reach. Various indications of the ability of the animal to "perceive, recognize, and reinstate a visual indicator after a delay of at least ten minutes" are presented. There is also considerable data of an observational nature on general adaptation, affective reactions, social relations, adolescence, and sexual behavior. Further experimentation is prevented by the animal's death. 16 plates.—N. L. Munn (Clark).

1898. Yoshioka, J. C. A note on a right or left going position habit with rats. *J. Comp. Psychol.*, 1928, 8, 429-433.—This experiment was designed to discover some factor which might be significant in determining right or left position habits of rats in a maze. A group of 30 male rats were run in a T-shaped maze, 5 times per day for 7 days. After this preliminary training each rat was given a final test which kept it in the maze as long as it ran. The running was stopped when the animal showed no further desire for food. In this final test one rat stopped at the 39th circuit, and the others ranged as high as 104 circuits. The rats as a group tended to take the right path more often than probability would allow. The animals were then killed and their skulls were cleaned. The curvature of the median suture of the nasal bones was correlated with the frequencies of the individual choice of the right path. The correlation between the frequencies of the right path in the training series and the angular measurements of the curvature of the median fissure

of the nasal bones was .312. The same in the first 35 runs in the final test was .432. Thus, when the maze had been learned more or less completely in the final test, the correlation coefficient became sufficiently high to be significant. This seems to indicate that in the final test, the rats had learned that either path was equally satisfactory in reaching the goal, and so let themselves go at random in the choice of paths. As a consequence they went more often in the direction to which the tip of their nose was pointing. The curvature of the median suture of the nasal bones of rats might be one of the factors responsible for position habits.—C. H. Graham (Clark).

[See also abstracts 1788, 1864, 1872, 1881.]

### EVOLUTION AND HEREDITY

1899. Boas, F. *Materials for the study of inheritance in man*. New York: Columbia Univ. Press, 1928. Pp. viii + 540. \$10.00.—The volume comprises the data tables (in manuscript, printed from plates), collected in 1909-1910, which formed the basis for the author's study, *Changes in Bodily Form of Descendants of Immigrants*. The data are grouped by families, ages and relationships being stated. The measurements for each individual comprise head length and width, face width, stature, hair and eye color, and two quotients (cephalic index and face width/head width). The nationality series are Sicilians, central Italians, Bohemians, Hungarians and Slovaks, Poles, Scotch and Hebrews. The data will probably be useful to psychologists chiefly as a background with which familial data derived from mental measurements may be compared.—R. R. Willoughby (Clark).

1900. Oast, S. P. *Blue sclerotics and brittle bones: report of occurrence in mother and child*. *Arch. Ophth.*, 1928, 57, 254-261.—The author reviews the literature and reports a case of the syndrome involving abnormally blue sclerotics, fragile bones and a predisposition to deafness.—C. W. Darrow (Institute for Juvenile Research).

[See also abstracts 1782, 1873.]

### SPECIAL MENTAL CONDITIONS

1901. Allendy, R. *Zur Psychoanalyse der Ahnungen*. (Psychoanalysis of presentiments.) *Imago*, 1928, 14, 486-497.—The knowledge of one's organic condition is generally unconscious, but a presentiment, like a dream, may serve for its discovery. In some cases there is evidence that the idea of one's fate is projected on what is then felt as a sign. There is evidence that some soothsayers know merely the idea in the consulting person's unconscious. Perhaps an unconscious infantile imago helps to shape our destiny.—C. Moxon (San Francisco).

1902. Bach, B. *Weibliche Art und Unart. Beiträge zur Auffassung des Verhältnisses der Geschlechter*. Stuttgart: Greiner & Pfeiffer, 1928. Pp. 8.—W. S. Hunter (Clark).

1903. Bjerre, P. *Schuld und Gnade*. (Guilt and grace.) *Allg. ärzt. Zsch. f. Psychotherap. u. psych. Hygiene*, 1929, 2, 1-11.—A discussion of the crises which occur in human lives, which may lead to neurasthenia, or which may be for the benefit of the individual in the end, since no one who has not suffered can appreciate. The two points in life leading generally to such suffering are the overwhelming power of sex, and marital difficulties. An anxiety neurosis is compared to death, and the conquering of the neurosis to the regaining of life. The question of actual guilt versus imagined guilt is discussed and the difficulty of solving the problem empirically is mentioned, the great individual differences to be found being emphasized.—D. E. Johannsen (Clark).

1904. Braun, L. *Die Psyche des Herzkranken*. (The psyche of heart-diseased people.) *Zsch. f. Psychol.*, 1928, 106, 1-22.—Under normal conditions we are not conscious of the rhythmical activity of the heart. In case of an extra systole the deviation from the normal rhythm is sensed. The change in the normal cardiac rhythm leads to extremely strong psychic after-effects. "Often the causal connection between rhythmical and psychic disturbance is very clear." Mental states developed on the basis of angina pectoris are chiefly characterized by fear. The author distinguishes *Angst*, "a primitive, instinctive, hereditary sensation independent of experience" and *Furcht*, which has always a definite stimulus in the external world. It is considered that for the psychology of *Angst*, angina pectoris is a subject of prime importance.—H. Klüver (Institute for Juvenile Research).

1905. Gilliland, A. B. *Problems of personality*. *J. Abn. & Soc. Psychol.*, 1928, 23, 369-378.—This paper makes a brief description of personality as given by several psychologists, and then outlines its chief characteristics and problems. The first problem considered is: What is personality? Then comes the origin of personality, followed by the evolution of personality. The fourth problem is the analysis of personality. Measurement of these personality traits is the fifth problem.—C. H. Johnson (Boston Psychopathic Hospital).

1906. Hartmann, H. *Psychoanalyse und Wertproblem*. (Psychoanalysis and the problem of value.) *Imago*, 1928, 14, 421-440.—Psychoanalysis cannot give us final goals for practical activity in ethics, pedagogy, etc. From analytic experience there is no way by which one is justified in taking a valuing attitude in such matters. The validity of moral judgments cannot be empirically proved. We must beware of the "genetic" fallacy leading to a depreciation of high values when their source is discovered in an impulse that is generally given a low value: of the "topical" fallacy leading to a valuation



of the unconscious events by analogy to the conscious from which they are interpreted: and of the therapeutic fallacy leading to the estimation of health values as objectively superior to other kinds of value. Psychoanalysis has contributed to the psychology of world views, but the analyst (or analysis) as such must not be attached to a particular world view.—C. Moron (San Francisco).

1907. Henning, H. Über innere Hemmungen. (On inner inhibitions.) *Zsch. f. Psychol.*, 1928, 106, 23-57.—Experiments designed for differentiating character types. The subjects (463 persons, children and adults) had to draw or to write something which they would consider entirely different from the figures, drawing, words or sentences shown to them. The degree to which the subjects were influenced by the examples shown was determined. Henning believes that two character types can be distinguished. The first type is always influenced by examples of some sort (samples, phrases, current opinion, dogma); the second type arrives at solutions which in no way remind one of the examples. The relations to drawing ability, intelligence and perseverance are considered. 6 figures.—H. Klüver (Institute for Juvenile Research).

1908. Jones, E. The development of the concept of the super-ego. *J. Abn. & Soc. Psychol.*, 1928, 23, 276-285.—A child incorporates the loved object into his own ego by way of identification, and thus erects a modified ego, the nucleus of the super-ego. For identification to take place there must be an attitude of ambivalence towards the person concerned. Normally a boy's ambivalence towards his mother is not sharp enough for this to happen; his identification is therefore mainly with his father. In homosexuality the boy's identification is mainly with his mother. The general law is that the super-ego is in all cases of predominantly homosexual origin.—C. H. Johnson (Boston Psychopathic Hospital).

1909. Kamiat, A. Causative and sustaining factors of the delusion of infallibility. *Soc. Sci.*, 1929, 4, 1-8.—Fear of the world may compel a retirement into the hospitable confines of a delectable creed. An idea or idea-symptom that fulfils the function of a haven of refuge displaces a certain amount or aspect of reality. The behavior of the individual is to some extent determined by his more or less subconscious picture of his ideal self. This fantasmal self is envisaged as the possessor of an ideology that is identical to truth. The presence of the fiction of inerrance testifies to the absence of either the quality of psychological intelligence, or the virtue of an intelligent control over the mental processes. Beliefs become associated with grandiose concepts like truth, justice, morality; they are pressed into service in the defense of the laws, customs, institutions, extant or proposed, with which these grandiose concepts are identified; they thereby become sanctified and therefore inerrant. An assault upon one's beliefs is apperceived as an attack upon one's self. The fantasy

of infallibility is one of the devices for the suppression of doubt. Other lines of defense against doubt consist of reassurance-rituals.—A. H. Kamiat (Brooklyn, N. Y.).

1910. Langer, G. Zur Funktion der jüdischen Türpfostenrolle. (The function of the scroll on the Jewish door posts.) *Imago*, 1928, 14, 457-468.—With evidence from similar customs Langer argues that the roll inscribed with Bible verses is a substitute for an original phallic emblem. In consequence of the long and intense process of repression, the roll has little of the original phallic character—only the apotropaic power, like the blood on the door associated with menstruation, and the long form.—C. Moron (San Francisco).

1911. Lehman, H. C., & Witty, P. A. Sex differences in credulity. *J. Abn. & Soc. Psychol.*, 1928, 23, 356-368.—This paper shows graphically that there is a significant sex difference in regard to credulity as expressed in the attitudes of the sexes towards fortune-telling activities. It suggests that this sex difference may be due in part to woman's relatively great emotionality or to her restrictions. These forces may cause her more frequently than man to fall back upon feeling for guidance.—C. H. Johnson (Boston Psychopathic Hospital).

1912. Lewin, B. D. Zur Geschichte der Gewissenspsychologie. (A contribution to the history of the psychology of conscience.) *Imago*, 1928, 14, 441-446.—Etymological evidence is given that the concept "conscience" has arisen from the concept "conscience," and remarks are made on the moralizing school of psychiatry to which Heinroth belonged, and on the tendency to exclude the soul from a psychiatry with an increasingly somatic viewpoint.—C. Moron (San Francisco).

1913. Lundholm, H. An experimental study of functional anesthetics as induced by suggestion in hypnosis. *J. Abn. & Soc. Psychol.*, 1928, 23, 337-355.—The main purpose of the experiment was to try to investigate, by means of a conditioned response method, what is called mental dissociation. More specifically, the problem has been to study artificially induced anesthetics by investigating their influence, both on the conditioning of responses and on responses already conditioned. The suggesting of various anesthetics by hypnosis caused more than a passive dropping out of a function from the personal consciousness—the suggestion definitely has set up a positive tendency, which becomes co-conscious in the post-hypnotic condition, toward acting as if the sensory disorder existed; this tendency expresses itself in a definite co-conscious inhibition of habitual reactions. The nature of functional anesthetics as induced by hypnosis may, in short, be restated as follows: the suggestion of an anesthesia primarily builds up a tendency to act as if this defect were there. This tendency, which becomes co-conscious to the post-hypnotic personality, inhibits in him any striving in relation to impressions received through

a certain sensory area. This deprives such impressions of meaning to such an extent as to make the subject suffer an apparent anesthesia for them.—*C. H. Johnson* (Boston Psychopathic Hospital).

1914. **MacDonald, A.** Human death. *Med. Times*, 1928, 1-20.—A summary of the mental and physical changes which take place during the process of death. The physical changes are described in detail. The moribund person is usually indifferent to his surroundings and rarely realizes that he is about to die. A description of death in several types of insanity is given.—*O. W. Richards* (Clark).

1915. **McClatchy, V. R.** A theoretical and statistical study of the personality trait originality as herein defined. *J. Abn. & Soc. Psychol.*, 1928, 23, 379-382.—The term "originality" is used to designate the fact that certain persons react to the majority of situations in a novel manner. Their reactions are novel not only in so far as other persons are concerned, but they differ from time to time in the persons who make the so-called original reactions. The term is related to such other terms as: constructive imagination, independence, initiative and ingenuity of a constructive sort. The results are not adequate because of the small number of subjects. One conclusion was reached: "originality," however defined, is rarely encountered.—*C. H. Johnson* (Boston Psychopathic Hospital).

1916. **Nunberg, H.** Probleme der Therapie. (Problems of therapy.) *Int. Zsch. f. Psychoanal.*, 1928, 14, 441-457.—The need for a technic of psychoanalysis is obvious. The discoveries of Jung, Adler, Rank, Reich, Alexander and Reik are not new, but long ago found their proper place in the psychoanalytic doctrinal structure. In the psychoanalytic process of cure of an ideal case, the following alterations in the whole personality take place. The energies of the id become more mobile, the super-ego more tolerant, the ego freer of anxiety and its synthetic function restored. The analysis is accordingly a real synthesis. The technic is not to disturb the course of the cure, but rather to use the natural tendency to health, which brings the patient to analysis.—*C. Moxon* (San Francisco).

1917. **Pacheco e Silva, —, & Rebello Neto, —.** Un sadico-necrophilo. O prete Amaral. (A necrophilous sadist. The clergyman Amaral.) *Arch. soc. med. e crim. de S. Paulo*, 1928.—The author reports on a negro named Amaral, a sexual pervert in whom sadism and necrophilism were combined. He used to allure boys to an unfrequented place, where he strangled them, stripped them of their clothes and then raped them.—*R. E. Schwarz* (New York University).

1918. **Palmes, F.** La metapsiquica de Richet. (The metapsychics of Richet.) *Iberica*, 1926, 26, 30-32.—Richet defined metapsychics as "a science which has for its object the mechanical or physiological phenomena which are due to forces that seem intelli-

gent or to powers which are latent and unknown in the human intelligence." Piéron is quoted as having stated that "at the present hour there is no positive data which must be referred to unknown forces, or which could serve as a foundation for a metapsychics."—*J. W. Nagge* (Clark).

1919. **Palmes, F.** Experiencias de ectoplasma de William Crookes. (Experiences of William Crookes with ectoplasm.) *Iberica*, 1927, 28, 5-9.—The experiences of Crookes at spiritualistic meetings are briefly discussed. Richet had also cited these in his work, especially the experiences of Crookes with materialization and ectoplasm.—*J. W. Nagge* (Clark).

1920. **Palmes, F.** Epilogo a la critica de la metapsiquica objetiva. (Epilogue to the criticism of objective metapsychics.) *Iberica*, 1928, 29, 21-27.—This article is a summary to a series of articles published by the author through several issues of this journal. Can metapsychics, as Richet presents it, be a science or is it only an apparent science? The author claims that it is only a pseudo-science, since it uses methods which science frowns upon. Metapsychics has no claim to be a separate science and if some of its phenomena are scientifically true they can well be arranged under the facts of physics and psychology. Richet has recently given metaphysics a new definition, as "the study of vibrations." These latter are not physical but mysterious in nature. The author states that metapsychical societies are in existence in Madrid and Barcelona and that the movement is growing surprisingly.—*J. W. Nagge* (Clark).

1921. **Pfister, O.** Psychoanalyse und Weltanschauung. Wien: Int. Psychoanal. Verlag, 1928. Pp. 132. M. 5.60., Lw. 7.—*W. S. Hunter* (Clark).

1922. **Richards, E. L.** Mental aspects of play. *Amer. Phys. Educ. Rev.*, 1929, 34, 98-100.—To walk to and from work daily to fulfil a doctor's prescription for exercise in the open air defeats its purpose unless the patient enjoys his walk. Hiking or walking with a pleasant companion combines muscular activity with emotional satisfaction, and we know that true relaxation and diversion cannot occur without the element of enjoyment. The day-dream or air castle is a natural experience in every normal human being, but the day-dream becomes a danger when child, adolescent and grown-up fails to express it in action. The day-dream, to be constructive, must express itself in actual games of make-believe. The boy or girl who has learned to do this on the playground will invariably put these principles into use in the business and social relationships of life.—*R. Stone* (Clark).

1923. **Richardson, F. H.** A doctor's letters to expectant parents. New York: Norton, 1929. Pp. 118. \$1.75.—The nine pairs of letters dealing with the physical and psychological aspects of pregnancy are addressed to both parents. The author suggests that one pair be read each month.—*L. W. Gellermann* (Clark).

1924. Ritter, S. M. Automatic writing by a blind subject. *J. Abn. & Soc. Psychol.*, 1928, 23, 383-392.—An account, with reproductions, of automatic writing by a musician who had been blind from childhood. Messages from his dead wife were supposed to be the contents of the writings, but the author suggests that although the subject is aware at the moment of what is being written, he is unaware that he is the originator of the movement also, so that these messages, apparently, are of a wish-fulfilling character.—C. H. Johnson (Boston Psychopathic Hospital).

1925. Sarma, R. N. New light on dream psychology. *J. Oriental Res.*, 1928, 251-265.—Western analysis of dreams is inadequate because it does not find out all about the psychological structure of the dream without being sidetracked into physiological and medical considerations. The Sanskrit Upanisadic texts avoid this difficulty. They teach that there are four states: waking, dreaming, dreamless sleep, and the final state of oneness. The dream occurs in sleep as a compensation for, or an escape from, the fatiguing realities of waking life when the realities are not resolved. Dreams are elaborated from the sum of experience stored in the unconscious. External reality is eaten up by the body of 19 faces (5 intellectual sense organs, 5 activity-organs, 5 breaths, Manas, Buddahi, Ahankāra and Citta) and 7 limbs (earth, water, fire, air, empty-space, time and space) during the waking state. During sleep the same figure appears and creates an ideal dream world wherein wrongs are righted, revenges obtained, and all is satisfying. The escape, from the Upanisadic texts, can hardly be summed up under the dream theories of Freud, Rivers, and Hollingworth. The Western theories lack the cycle of waking to dreaming to dreamless sleep (this step may be omitted) to waking which leads to and is inevitably rounded off with the fourth state which transcends all with perfect bliss.—O. W. Richards (Clark).

1926. Simonson, E. Über das Verhältnis von Raum und Zeit zur Traumarbeit. (The relation of space and time to the dream work.) *Imago*, 1928, 14, 469-485.—The ideas of space and time are not, unalterably attached to every thought process *a priori*. Dreaming is such a thought process in the work of which time and space take no part, because the space-time ideas, in consequence of their phylogenetic recency, are temporarily put out of action by sleep. Where space and time nevertheless seem to play a part in the dream, it is only in the sense that time does not alter psychical events, and that spatial relations are only taken over ready made. The dynamics of dream work are facilitated by the absence of space and time.—C. Moxon (San Francisco).

1927. Simpson, R. M. Memory color and tuberculosis. *Amer. J. Psychol.*, 1928, 40, 351.—For many months following hemorrhage of the lungs tubercular patients have fleeting impressions when

they expectorate white or yellow matter that it is red in color. The illusion is reported in 95% of the hemorrhage cases.—E. R. Hilgard (Yale).

1928. Soesman, F. J. Rêves organo-génésiques. (Organogenic dreams.) *Ann. méd.-psychol.*, 1928, 86, 64-67.—The following conclusions are in order: (1) Organic stimuli provoke dreams; (2) these stimuli are transformed by the imagination into variable symbols, which present the same characteristics; (3) some of the primary characteristics of the organic stimuli are transmitted with the greatest constancy in the images of the dream.—P. A. Pooler (Boston).

1929. Sommer, R. Die psychische Hygiene des Lärmes. (The mental hygiene of noise.) *Allg. ärzt. Zsch. f. Psychotherap. u. Hygiene*, 1929, 2, 33-34.—A brief discussion of the problem of controlling noise from the point of view of mental hygiene. It is pointed out that the problem was first attacked as a problem of industrial hygiene, and that only recently has the interest shifted to the more general application. At the end of the article it is pointed out that the problem of controlling the many smells which afflict humanity as a result of increased numbers of motor vehicles, etc., is another of the same order, and it is suggested that the protection and care of the sense organs and the concomitant sensations in general are problems demanding attention from the people interested in mental hygiene.—D. E. Johannsen (Clark).

1930. Stekel, W. [Ed.] Fortschritte der Sexualwissenschaft und Psychoanalyse. (Advances in sexual science and psychoanalysis.) [Ed. by A. N. Missriegler and Emil Gutheil.] Wien: Deuticke, 1928. Pp. 195.—W. S. Hunter (Clark).

1931. Wells, F. L. Reaction time and allied measures under hypnosis: report of a case. *J. Abn. & Soc. Psychol.*, 1928, 23, 264-275.—It appears from this case that so far as functional efficiency is concerned, the force of suggestion varies greatly with different functions. Attention also must be paid to equalizing, at least objectively, the force of special suggestions in the various states where effects of the hypnotic process are to be compared. Other problems concern the criteria of the hypnotic state and possible change and fluctuation during the periods under experimental study.—C. H. Johnson (Boston Psychopathic Hospital).

1932. Wilcocks, R. W. Oor die Metode van Invalle. (On the method of "free" reproductions.) *So. African J. Sci.*, 1928, 25, 491-498.—The question is emphatically asked to what extent one can know that the so-called "free" reproductions lead to the psychological causes of the manifest dream content. It is shown that the reproductions are "not free" in an even more specific sense than Freud accepts. They are determined processes, i.e., one's reproductions are controlled by schematic anticipations. Certain schematic anticipations are described which can result in the reproduction leading to the accumula-



tion of empirical data only apparently proving principles which are fundamental in psychoanalytic theory and practice. It is also pointed out that the question remains unanswered as to how one can recognize precisely when the psychological causes for the manifest dream are arrived at in a chain of reproductions. Schematic anticipations are suggested which will lessen such dangers attending an uncritical use of the method under consideration. The possibility is discussed of avoiding an anticipation unfavorable to the discovery of the psychological causes of a dream containing symbolism.—*H. F. Verwoerd* (Stellenbosch).

1933. Zulliger, H. "Die Roichtschäggeten." Über einen Maskenbrauch. (The soot-checked ones. A custom with masks.) *Imago*, 1928, 14, 447-456.—In the Lötschental, Switzerland, on certain days the young men, masked to identify with the fathers, symbolize by their sooty covering birth from the fathers' hearth (mother's womb), and squirt sooty suds and blood at the women and girls. This coitus symbolism is an expression for the Oedipus wishes. Parallels to this custom are cited.—*C. Moxon* (San Francisco).

[See also abstracts 1863, 1937, 1938, 1946, 1947, 2005, 2100, 2104, 2110.]

#### NERVOUS AND MENTAL DISORDERS

1934. Alpers, B. J., & Waggoner, R. W. Extraneural and neural anomalies in Friedreich's ataxia. *Arch. Neur. & Psychiat.*, 1929, 21, 47-60.—The author reports cases of Friedreich's ataxia present in two generations of one family. Spina bifida occulta was found in seven of nine offspring examined and gives evidence of a tendency to degeneration in the family stock. Other physical evidence of degeneration has been reported in almost every system of organs in the body. This family shows one of the few instances where it has been traced as a definite hereditary disease through several generations.—*E. C. Whitman* (Boston Psychopathic Hospital).

1935. [Anon.] Concussion of the brain, or "punch drunk." *J. Amer. Med. Assn.*, 1929, 92, 314-315.—The mental changes which follow blows upon the head, the so-called "punch drunk," have been shown by recent investigators to be due to minute hemorrhages in the brain.—*G. J. Rich* (Bellevue Hospital).

1936. Baruk, H., & Morel, —. Contribution à l'étude de la psychologie et physiologie pathologique de l'hébéphrénocatatonie. (A contribution to the psychology and the pathological physiology of hebephrenic catatonia.) *Ann. méd.-psychol.*, 1928, 86, 12-57.—The author summarizes his work as follows: (1) Hebephrenic catatonia cannot be conceived of as an affection bearing exclusively upon the cenesthetic and affective elements. It causes a very complex disturbance of the mental activity, which spurs on secondary automatic manifestations; (2) from the

physiological viewpoint the motor-catatonic syndrome cannot be considered under the range of "a narrow localization" and exclusive of the central levels; (3) the clinical and physiological findings show in this affection the importance of the phenomena of both psychic and psycho-motor liberation.—*P. A. Pooler* (Boston).

1937. Bibring, E. Klinische Beiträge zur Paranoiafrage. I. Zur Psychologie der Todesideen bei paranoider Schizophrenie. (Clinical contributions to the paranoia question. I. Psychology of ideas of death in paranoid schizophrenia.) *Int. Zsch. f. Psychoanal.*, 1928, 14, 508-517.—Cases are cited to show that the "dying" satisfies the tendency to revenge and aggression belonging to a negative libidinal attitude to the object. But at bottom the delusion of someone's death means the same as the figure of speech, "You are dead to me," i.e., no longer the object of any feelings of love or hate. Bibring compares the death and reanimation of persons in delusions and in dreams.—*C. Moxon* (San Francisco).

1938. Brunswick, R. M. Die Analyse eines Eifersuchtswahnes. (The analysis of a delusion of jealousy.) *Int. Zsch. f. Psychoanal.*, 1928, 14, 458-507.—A case of a psychotic woman with the one symptom of delusional jealousy, around which were grouped some ideas of persecution. The cause of the psychosis was unconscious homosexuality. Marriage occasioned the outbreak of the malady—the husband being unable to take the sister's place. The very early seduction by the patient's older sister caused a strong trauma and a fixation which blocked the path of development to the Oedipus complex and heterosexuality. The case shows that under quite special structural conditions a paranoid process can be analyzed and therapeutically influenced. This patient has remained well for over a year and has adjusted to a difficult family situation and a neurotic husband. The detailed study of the case includes the following subtitles: analysis of the infantile sexual strivings; the influence of the seduction; death fantasies; the infantile masturbation; penis envy and castration anxiety; homosexual jealousy and anal erotism. With examples of dreams the three paranoid phases are sketched in relation to the course of the two and a half months' analysis, including the phase of negative transference.—*C. Moxon* (San Francisco).

1939. Courbon, P. De la survivance de l'affectivité au naufrage de l'intelligence dans certains psychoses chroniques. (On the survival of affectivity in mental deterioration in certain chronic psychoses.) *Ann. méd.-psychol.*, 1928, 86, 419-433.—Despite an incoherence of language and conduct, an extreme indifference to people around them, and neglect of themselves, the two patients (as here reported) showed a commendable altruistic spirit in their ministrations to the sufferers of the asylum. Contrary to what seemed probable at first, the intel-

lectual troubles were in reality less profound than the affective disturbances. It was a matter of the retraction of affection in consequence of which the intellectual elements, although always existent, could be utilized only for the satisfaction of the reversion tendencies. Whence arose in this particular case, the absurdity of the conduct in all cases were altruism did not come into play. These cases are not related to dementia, but to schizophrenia.—P. A. Pooler (Boston).

1940. Davidoff, L. M. The brain in mongolian idiocy. *Arch. Neur. & Psychiat.*, 1929, 20, 1,229-1,257.—Mongolian idiots who resemble each other clinically fail to show any marked degree of unanimity pathologically. Certain morphologic changes are constant with the exception of a small cerebellum and brain stem, the embryonic convolutional pattern, and a small content of ganglion cells of the third cortical layer. The author concludes that the brain in mongolian idiocy shows (1) agenesis, as evidenced by cell poverty and failure of gyral development, (2) aplasia, shown by its small size in comparison with that of children of corresponding age, and (3) paragenesis, as demonstrated by the frequent occurrence of anomalies.—E. C. Whitman (Boston Psychopathic Hospital).

1941. Doan, J. C. Occupational therapy. *Occup. Therap. & Rehab.*, 1929, 8, 11-16.—Physicians should know more about the psychology of sickness and of the relatives of the sick. Some dispositions become more irritable and unpleasant during sickness, and with others the reverse is true. The pupils in schools of occupational therapy are learning some of these clinical manifestations.—H. E. Burt (Ohio State).

1942. Elonen, A. S., & Woodrow, H. Group tests of psychopathic tendencies in children. *J. Abn. & Soc. Psychol.*, 1928, 23, 315-327.—Various scores obtainable from the free association test differ considerably in the degree of correlation existing between them. No existing frequency table suffices for the determination of peculiar or pathological responses in a purely objective manner. Of the various scores obtainable from the free association test, the one which agrees best with ratings on "normality of behavior" is that representing the number of pathological responses. The ratings by teachers upon a rating scale of "normality of behavior," which were used in this study as a criterion of tendency towards psychopathy, were probably unduly biased by differences between the children in intelligence.—C. H. Johnson (Boston Psychopathic Hospital).

1943. Greenwood, A. Mental disturbances following operations for cataract. *J. Amer. Med. Assn.*, 1928, 91, 1,713-1,716.—Mental disturbances occur in about 3% of all patients operated for cataract. The primary causes are the advanced age of the patient and the bandaging of both eyes. The patient tends to become apprehensive, confused or

frightened. Prophylaxis consists of measures to reassure and encourage the patient, together with sedatives. After the operation a nurse should be constantly at the bedside for at least 48 hours. The most effective active treatment is some measure to show the patient that he can really see.—G. J. Rich (Bellevue Hospital).

1944. Harrington, M. A. The mental health problem in the college. *J. Abn. & Soc. Psychol.*, 1928, 23, 293-314.—There are four outstanding causes of mental ill health in the college: (1) failure on the part of the student to deal in a satisfactory way with the demands of his sexual instinct, (2) failure to make a satisfactory adjustment in the sphere of his social life, (3) failure to adjust himself satisfactorily in matters pertaining to his work in the college, (4) physical ailments of one kind or another. One of the ways in which the college may preserve the mental health of the student is in giving him such individual assistance as he may require in making his adjustments during the time that he is in college. A suggested plan, where the men live in the college, would be to make the dormitory a unit so as to have a direct contact with the student. In the dormitory, as a unit, would center the social life of the student. The unit would consist of about 100 men who would live in one dormitory during their college career with counselors assigned to the units under the direction of the mental health officer. The mental health department would consist of the mental health officer, a trained psychiatrist, who is responsible for the mental health of the student body as a whole, and under him a group of counselors, each of whom would be responsible to the psychiatrist for the mental health of the students in his unit.—C. H. Johnson (Boston Psychopathic Hospital).

1945. Hershfield, A. S., Kibler, O. A., Colby, S., Koenig, M. T., Schmid, O. W., & Saunders, A. M. Sodoku treatment in paresis. *J. Amer. Med. Assn.*, 1929, 92, 772-773.—Patients treated by inoculation with rat bite fever showed both physical and mental improvement.—G. J. Rich (Bellevue Hospital).

1946. Hirschboeck, F. J. Treatment of functional heart disease. *J. Amer. Med. Assn.*, 1928, 91, 1,852-1,857.—Two cardiac conditions may be considered purely functional in origin: neuro-circulatory asthenia, and pure cardiac neuroses, usually of emotional or psychogenic origin. These two conditions frequently overlap. Pure cardiac neurosis is dependent for its treatment on a psychotherapeutic approach. In neuro-circulatory asthenia the management is vocational guidance, exercise, and definite assurance to the patient that there is no organic disease.—G. J. Rich (Bellevue Hospital).

1947. Jastrow, J. Relation of medicine to psychology. *J. Amer. Med. Assn.*, 1929, 92, 720-723.—Neither physician nor psychologist should consider human behavior as divided into bodily behavior and mental behavior, but as united, forever joined in

that organic union that conditions strength and weakness alike. There is no more cogent example of the interpenetrating territory of medicine and psychology than the Freudian movement. The neuroses require the attention of workers in both fields. Every large community needs a "misery clinic" for the maladjusted of various types, a clinic in which physicians, psychologists, social workers and laymen meet common problems.—*G. J. Rich* (Bellevue Hospital).

1948. **Lautier, J.** *Délire et responsabilité pénale.* (Delusion and penal responsibility.) *Ann. méd.-psychol.*, 1928, 86, 409-414.—Should a person having delusions without mental impairment be held responsible for an unlawful act independent of the delusions? A woman of 49 years had chronic delusions of persecution by her husband and two visionary women. After three years of hospitalization the delusions decreased, she gradually forgot the delusions of the husband, and when she left the hospital she was told that the woman who persecuted her was dead. Later she stole a valise from a railroad station. Because her intelligence was adequate to realize the seriousness of her act, and as she stole the valise for normal covetous reasons, and, since none of her delusions were found on examination to be involved, the alienist decided that she should serve her prison sentence of one month.—*O. W. Richards* (Clark).

1949. **Lelong, P.** *Evolution psychologique d'une schizophrène.* (The psychological evolution of a schizophrenic.) *Ann. méd.-psychol.*, 1928, 86, 348-360.—This is a case history of a schizophrenic, in whom there appeared a progressive integration of sexual tendencies as a result of defective adaption. Consciousness in quest of equilibrium, unable to follow the progress of the "dynamic tendencies," is driven to more and more grave situations. The tendencies are transformed in the "*milieu extérieur*," but at the expense of a delirium of "influence" (segregation). "They are reintegrated, and succeed in dominating consciousness, but this has slumbered in a complete discordance and their triumph rests without pragmatic import."—*P. A. Pooler* (Boston).

1950. **Norman, H. J.** *Mental disorders: a handbook for students and practitioners.* New York: Wood, 1928. Pp. xv + 463. \$5.00.—The author presents a compact handbook on mental disorders. The emphasis throughout is put on the practical rather than the theoretical aspect of the subject. A consideration of the various symptoms, diagnoses, prognoses, and treatments of many mental and nervous disturbances is made. The field of mental deficiency is treated from the practical and in lesser degree from the abstract or psychological viewpoints. The last two chapters of the work are entitled, "Clinical examples in life and literature," and "Legal considerations," the latter regarding the mentally

subnormal. A bibliography is appended.—*J. W. Nagge* (Clark).

1951. **Nyirő, G.** *Némely hasadási jelenség differenciális lélektani és psychopathologiai értékeléséhez.* (Various phenomena of dissociation of personality and their importance for differential psychology and pathology.) *Magyar pszichologiai szemle*, 1928, 1, 89-95.—The author attempts to differentiate between the schizophrenic and the hysteric personality on the basis of dissociation; he conceives the latter to be conditioned by a congenitally primitive constitution, which reacts to reality by low-grade mechanisms. Among the important differences mentioned is that the hysteric forces reality to yield him satisfaction, and is concerned to inform his surroundings as to his success in understandable language; while the schizophrenic obtains his satisfactions autistically, is not interested in communicating with the world, and speaks a language chiefly symbolical.—*R. R. Willoughby* (Clark).

1952. **Sachs, B.** *Amaurotic family idiocy and general lipid degeneration.* *Arch. Neur. & Psychiat.*, 1929, 21, 247-253.—Amaurotic family idiocy, besides showing certain structural changes, shows also a deposit of a lipid substance within the cells, and shows also a relation to a group of diseases, Gaucher's disease and an infantile disease known as the "Niemann-Pick" type, both types being variants of a general lipid cellular degeneration with enlargement of the spleen and liver. This seems to indicate that amaurotic family idiocy will have to be taken out of the category of hereditary and degenerative diseases, as put forth by Schaffer, and classed among the primary metabolic disturbances.—*E. C. Whitman* (Boston Psychopathic Hospital).

1953. **Singer, H. D.** *Mental disease and the induction of abortion.* *J. Amer. Med. Asso.*, 1928, 91, 2,042-2,044.—Toxic or organic mental disease should be considered as an indication for the termination of pregnancy only when the underlying bodily condition warrants such interference irrespective of the mental state. States of fear, manic-depressive psychoses and schizophrenia occurring during pregnancy are rarely benefited and are frequently made worse by the induction of abortion, as the underlying cause is not reached.—*G. J. Rich* (Bellevue Hospital).

1954. **Strecker, E. A.** *Behavior problems in encephalitis. A clinical study of the relationship between behavior and the acute and chronic phenomena of encephalitis.* *Arch. Neur. & Psychiat.*, 1929, 21, 137-143.—With clinical material consisting of 50 consecutive instances of encephalitis in children, ranging in age from 18 months to 16 years, the author has (1) analyzed the initial symptoms and signs in these cases which ended in behavior disorders, such as sleepiness, fever, involvement of the eye-muscles, delirium, etc., (2) reviewed the conduct disorder in regard to frequency, extent, type, and seriousness (behavior is only slightly disturbed when



fever, delirium, or influenza-like phenomena are absent and vice-versa), and (3) determined the possible relationship between behavior and sex, age, type, clinical phenomena, delirium, and neurological signs. Behavior disturbances are more severe with boys but sexual deviations are more pronounced in girls. When the onset of the disease comes before adolescence, the likelihood of severe behavior disorders is greater. In a large number of cases, there was persistent or late development of neurologic signs; these cases less frequently showed behavior disorder. A discussion followed the paper.—*E. C. Whitman* (Boston Psychopathic Hospital).

1955. Timme, W. Pluriglandular syndrome, involving calcium deficiency and correlated with behavior disturbances. *Arch. Neur. & Psychiat.*, 1929, 21, 254-260.—A number of patients presented close resemblances: gross behavioristic anomalies (incurability, assaultiveness, etc.) with deficient utilization of calcium, parathyroid deficiency, and pineal involvement and with secondary disturbances in growth, blood pressure, and gonadal development. This syndrome is easily recognizable and lends itself to therapeutic treatment.—*E. C. Whitman* (Boston Psychopathic Hospital).

1956. Trochine, G. J. La démence. (Dementia.) *Ann. méd.-psychol.*, 1928, 86, 307-337.—Inasmuch as dementia is a progressive disorganization of the psyche according to a "determined plan," the author finds it expedient to introduce his subject with a discussion of the normal psyche, which consists of five levels: the reflexive-instinctive, the primitive (perception, laughing, crying, etc.), the stage of imitation and suggestion, the mechanical (memory and language), and the superior. The initial stage of the disorder (known as mechanical dementia) presents the following symptoms: absence of memory, which involves the superior type of attention, the absence of the stronger tension in the will—indicating that the superior functions have disappeared. Thus dementia results from the disappearance of the highest psychic level, which is the last to develop, leaving only the inferior levels to direct the organism. In the next stage, or imitative dementia, suggestibility and imitation dominate the whole symptomatology—as uniformity of judgment, idle words, perseverance, and stereotyped movements. The disappearance of the two levels is demonstrated by the memory of nothing new or contemporaneous, and the absence of both superior and mechanical attention. In automatic dementia, the superior, mechanical, and imitative levels are absent, the primitive alone remaining as the "director" of the psychic life. The patient appears as a mere automaton bereft of all personality. In the final stage, or absolute dementia, only the immediate sensations remaining. All associations, judgment, sense of time and space, and memory are lacking. Language consists of nothing more than a series of sounds. In fine, the patient becomes practically a vegetative organism.—*P. A. Pooler* (Boston).

1957. Trochine, G. J. La démence. (Dementia.) *Ann. méd.-psychol.*, 1928, 86, 394-414.—In this paper, the author takes up the clinical varieties of dementia, summarizing as follows: (1) the mental disorders which do not produce dementia (hysteria, the entire group of the psychogenic psychoses); (2) the mental disorders which produce "an obligatory dementia" progressively with four phases (progressive paralysis); (3) the mental disorders in which dementia is also necessary, but can be arrested; dementia with three degrees; not absolute dementia or "allusions to this": the traumatic psychoses, tumorous, luetic, arterio-sclerotic, senile, and epileptic; (4) the variety isolated from the preceding group (dementia precox); (5) the mental disorders which produce dementia but very rarely; the dementia has only a mechanical phase (the psychoses of intoxication and infection); (6) the mental disorders of which the dementia is under discussion (the manic-depressive psychosis, and paranoia).—*P. A. Pooler* (Boston).

1958. Witmer, E. R., & Witmer, L. Orthogenic cases. XVI. George: mentally restored to normal but intellectually deficient. *Psychol. Clin.*, 1928, 17, 153-169.—A case is described which at the start gave every appearance of being one of feeble-mindedness. Building upon the child's best trait, a love of orderliness, his teachers were able to make considerable progress with him. The methods used are described.—*J. T. Metcalf* (Vermont).

[See also abstracts 1878, 1882, 1962, 1982, 2079.]

#### SOCIAL FUNCTIONS OF THE INDIVIDUAL

1959. Anderson, A., & Dvorak, B. Differences between college students and their elders in standards of conduct. *J. Abn. & Soc. Psychol.*, 1928, 23, 286-292.—College students differ from parents and grandparents in the standards on which they base their conduct, in that they prefer the standards of prudence and esthetics to those of right and wrong. The great differences in standards of conduct occur between age groups rather than between sex groups. All groups tend to eschew the standard of public opinion. Since they make prudence and esthetics their chosen standards for rationalizing their conduct, college students probably could be appealed to on the basis of those standards far more effectively than on the standard of right and wrong. Social reactions analysis and key accompany article.—*C. H. Johnson* (Boston Psychopathic Hospital).

1960. Beringer, E. The psychology of Lady Macbeth. *Ethol. J.*, 1929, 14, 1-7.—Miss Beringer contrasts the portrayal of Lady Macbeth as shown in the artistry of Mrs. Siddons, Helen Faucit, and herself.—*F. M. Teagarden* (Pittsburgh).

1961. Binder, R. M. The Transylvania Saxons: a sociological study on racial survival. *Publ. Amer.*

*Sociol. Soc.*, 1927, 22, 195-199.—The Transylvania Saxons have maintained cultural integrity for nearly 800 years. Called from Holland to settle and fight in Hungary and act as a buffer against Mongol and Turkish invasions, they became politically independent and ethnically self-conscious. Solidarity has been maintained by means of education the beginnings of which are attributed to German neighbors, customs, folklore, and social tabu, the total effect of which has been to enhance ethno-centric feelings of superiority and prevent intermarriage. In their present situation in Rumania, they are in a favorable position to maintain the independence of their cultural life.—D. W. Willard (Clark).

1962. Carpenter, N. C. Feeble-minded and pauper negroes in public institutions. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1928, 140, 65-76.—Charts and tables relating to institutionalized negro and white paupers and feeble-minded, made from material drawn from the U. S. Census Bureau reports. "Differences in public policies and social and economic conditions in various states together with the probably unequal distribution of socially inadequate types in various regions virtually destroy the significance of any countrywide comparison between the two groups." It is suggested that further research might profitably be done in investigating the causes of the relatively early age of institutionalization of Negro paupers. The author concludes that physical disability is the most significant factor.—J. C. Spence (Clark).

1963. Carpenter, N., & Doughton, G. Case studies on the rôle of religion in the dissociated family. *Publ. Amer. Sociol. Soc.*, 1927, 22, 199-202.—The normal reactions of individuals to institutional influence are difficult to determine because of defective case records, and the types of cases found in the fields of social agencies. University students are the source of the cases of this report. Three cases of disorganized families illustrate a series thus gathered which show that religion and the church have played no vital part in family crises, and may even be considered as destructive influences in family history.—D. W. Willard (Clark).

1964. Carezzano, P. Il sintomo del Lombroso come carattere familiare. (Lombroso's symptom as a family trait.) *Arch. di antrop. crim.*, 1928, 48, fasc. v.—In this article Carezzano undertakes to prove "the existence of a strictly constitutional factor in the delinquency phenomenon" and the character of a family trait assumed by the psycho-physical anesthesia of delinquents, called the "Lombroso symptom" by Carlo De Sanctis in honor of the discoverer. For this purpose he examines the criminal careers of three brothers, all of whom showed the same complete physical insensitiveness to pain as proved directly by a clinical examination and indirectly by their profession as fakirs and by their numerous tattooings, which physical insensitiveness went together with a similar lack of moral sensitive-

ness. Only the first-born brother was an honest, domestic individual; and he showed no insensitiveness. The father, though addicted to drink and of a neuropathic constitution, was an honest workingman. It seems that the first-born son was not affected by the father's chronic alcoholic intoxication, which became worse later during the conception of the three younger sons.—R. E. Schwarz (New York University).

1965. Coe, G. A. *Motives of men*. New York: Scribners, 1928. Pp. 275. \$2.25.—This is not a book of science but of ethics by a man perturbed by the failure of our contemporary life to measure up to the ideals of what he considers real Christianity. Man today is considerably disillusioned about spiritual matters due to the influences of capitalistic economics, evolutionary biology and a materialistic psychology. Even literature has robbed man of the belief in his rationality, of a faith that one may rise above one's instinctive tendencies. But the author believes this disillusionment is itself illusory. We should not be bound by any narrow theory of stable instincts or uneducable emotions as our only motives. Habits outweigh instincts and emotions. Up to the present the motives of men—laborers, employers and professionals—have been a mixture of narrow self-interest and social-mindedness. But modern education of small children through directed conditioning shows us one way of modifying the growth of "bad" habits which prevent human happiness. Man is highly plastic by nature and once we acquire the correct formula of living, all will be well. We need new aims or ideals to bring this event to consummation. We must bring reason to bear upon our training, although traditional views of both impulse and reason bind us to outworn precedents. We fear our freedom because we do not know what to do with it, hence we follow the past lines of action. Aggressive minorities of serious thinkers and cooperative thinking on our problems will help release us from the bondage of the past.—K. Young (Wisconsin).

1966. Conti, U. Il magistrato dei minorenni. Quel che si è fatto all'estero. (The juvenile court. What has been done abroad.) *Arch. di antrop. crim.*, 1928, 48, fasc. v.—In this article the author gives the history and working methods of the juvenile courts in the United States and various European countries.—R. E. Schwarz (New York University).

1967. Deserontyon, J. A Mohawk form of ritual of condolence, 1782. (Trans. by J. N. B. Hewitt.) New York: Mus. Amer. Indian, Heye Foundation, 1928. Pp. 36. Apply.—W. S. Hunter (Clark).

1968. Faris, E. The sect and the sectarian. *Publ. Amer. Sociol. Soc.*, 1927, 22, 144-159.—Study of the sect, a contemporary phenomenon, affords opportunity for light on social origins, where ethnology has failed. It will yield data on such perennial problems as the relations of society and the individual, the leader and his group, instincts and

institutions and the like. Peculiarities in the histories of sects show how hazardous it is to generalize about such factors as the rôle of geographical environment, of instincts, etc. The sect is a product of social instability and embodies unique factors in every case. It flourishes in isolation, either physical or cultural, but has a cycle of rise and decline. In its various stages it produces the "sectarian," a different personality for each sect and for each period of sect history, but whose traits tend to persist by virtue of group life and tradition. The relations of institution and personality may be explained in terms of Pareto's *derivées*, *derivations*, and *residues*. Personality uniformities within a given sect in early stages of sect history (as well as of personal affiliation) are chiefly in the *derivées*, but spread to other aspects of personality with continued association. Recruiting of sects cannot be explained on the basis of initial like-mindedness, but rather on a principle of kindred aspiration of persons to be different from themselves, or like something else, though forces shaping institution and personality are not simple and uniform.—D. W. Willard (Clark).

1969. Fischer, H. *Erlebnis und Metaphysik; zur Psychologie des metaphysischen Schaffens*. (Experience and metaphysics; on the psychology of metaphysical achievement.) *Neue psychol. Stud.*, 1927, 3, 221-439.—An elaborate analysis of the development of the metaphysician's powers. Every great philosopher develops out of some great world crisis. The crisis unfolds the dormant potentiality of his creative soul, which comes to maturity under the influence of affliction, stress and storm. This affliction, however, is not so much a personal one as one caused by a newly established world view. The philosopher's sorrow results not from a weakness or lack, but from an oversupply of strength and energy, which he must repress in order to direct it for the good of his people. The metaphysician has a particular kind of personality; he has a certain feeling of oneness with the universe, a "world feeling" which makes him stand alone among his people. For him, love and hate are both means to the attainment of a higher goal, that of developing his soul in such a way that he may solve world problems. He must become creative. The philosopher has attained the height of his achievement when he becomes so unified with his mission that his entire being, his self, is wholly given to the cause.—C. Burri (Chicago).

1970. Frobenius, L. *Early African culture as an indication of present negro potentialities*. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1928, 140, 153-165.—Intensive study of the interior cultures not disintegrated by coastal invasions leads to the concept of two autochthonous cultures, Hamitic and Ethiopian, and a long series of invasive ones, of which three are described: the Erythrean, with a northern phase centering around Abyssinia and a southern phase in the Zambesi basin, characterized by a sacrificial king-god and originating in ancient Elam before

cultural superiority had passed into the hands of the West Semites; the Syrtic, entering and dominating the western Sudan in the first millenium A. D., characterized by a caste society much resembling the medieval European; and the Atlantic, centering in the Niger delta, characterized by a theocratic state, and representing the extreme limit of an irruption from Western Asia in the first millenium B. C. The Hamitic culture is pastoral, characteristic of the northern desert regions, and intensely rationalistic; the Ethiopian is agricultural, spreads in a broad band across the continent, and is permeated by a simple, emotional, mystical piety. It is the last quality which gives it, and the negro race which it characterizes, the amazing absorptive power which has engulfed while submitting to invasion after invasion, transmitting the cultural acquisitions derived from each into something distinctly African; and it is with reference to this quality that inquiries into present negro potentialities must be prosecuted. Questions are raised as to the durability and incubation period of these psychic characteristics and their resultant cultures when transplanted to alien soils. 24 distribution maps.—R. R. Willoughby (Clark).

1971. Galli, E. *Intorno all origine dei sentimenti estetici*. (Concerning the origin of esthetic sentiments.) *Riv. psicol.*, 1928, 24, 147-160.—The esthetic sentiment is dependent on the psycho-organic potential. It is enhanced by organic well-being, by specific sensory stimulation, and by sex activity. The author distinguishes three types of activity, utilitarian, esthetic and cognitive. The esthetic is the second in order of development phylo- and ontogenetically. Certain other factors contribute to the appearance of this sentiment, as hereditary sets in the nervous system, attention, inhibitions and habit.—T. M. Abel (Illinois).

1972. Garth, T. R., & Isbell, S. R. *The musical talent of Indians*. *Music Supervisors' J.*, February, 1929.—The Seashore Musical Talent Tests were given to 409 mixed-blood and 360 full-blood Indian children. Compared with tests taken at the same time upon white children, there was indicated a slightly higher rating in time and rhythm, a deficiency in consonance, and a marked weakness in pitch, intensity and memory. The authors conclude, however, taking other factors into account, that no real racial difference was shown.—B. F. Skinner (Harvard).

1973. Groves, E. R. *An introduction to sociology*. New York: Longmans, Green, 1928. Pp. vi + 568. \$3.00.—The student is given an insight into processes and experiences socializing the individual as he develops from childhood. This is the special avenue of approach to the field of sociology utilized by the book. Concise and illuminating chapters deal with institutions, social problems, and resources of social reconstruction and control. Discussion topics, problems for class work, and numerous references, chapter by chapter, appear as teaching aids in the appendix.—D. W. Willard (Clark).



1974. Hamilton, G. V. *A research in marriage*. New York: Boni, 1929. Pp. xii + 570. \$10.00. (Publication date cited in III: 810 was in error.)—The book comprises the frequency tables and most significant correlations derived from an exploratory methodological study on 100 wives and 100 husbands (including 55 couples) in New York City, together with a small amount of interpretation and suggestion by the investigator. The method was that of a rigidly controlled questionnaire, in which the questions were presented on printed cards and full notation made of the reactions of the subject; this was done in order to secure strict comparability of data. The sex problems of marriage are central, but these are set against a background including particularly such matters as economics and early conditioning. Among the principal criteria used are the orgasm capacities of the women and an index of satisfaction with the marriage as a whole. It is pointed out that since the research is not a survey but an exploration for significant antecedent-consequent correlations, the question of selection does not arise; among such correlations indicated are some which tend to substantiate the insights of Freud respecting the Oedipus situation and the pre-genital components of sexuality. The author is planning a revision and extension of the method, as well as other studies of a monographic nature derived from the present material. No bibliography.—R. R. Willoughby (Clark).

1975. Hirschfeld, J. *Shakespeare as a psychologist of crime*. *Ethol. J.*, 1929, 14, 8-10.—The article gives a brief account of two new books which have appeared on the continent on the above subject. The exact titles of the books are not given. One is by Köhler, the famous jurist. The other is by Goll, Chief of the Danish Police. The point of view of the former is "freedom of the will" while that of the latter is "determinism." Both books give psychopathological accounts of Macbeth, Lady Macbeth, Brutus, Cassius, Othello, Richard III and Iago. Köhler also considers Edmund and Cade.—F. M. Teagarden (Pittsburgh).

1976. Hutchins, R. M., & Slesinger, D. *Legal psychology*. *Psychol. Rev.*, 1929, 36, 13-26.—In the practice of law a rough and ready set of so-called psychological principles have been applied which the more recent growth of the science has tended to discredit. When the psychologists have left the courts to their own devices they have not done so badly so far as some questions of psychological fact are concerned. But practice is often demonstrably faulty, since the courts are not entirely consistent in their psychological assumptions, are slow to accept the findings of psychologists, and depend upon unreliable criteria in forming judgments of character, truth-telling, etc. On the other hand, psychologists at present have little to offer to many departments of the law. Psychology can gain by closer contacts with the problems demanding legal solution.—H. Helson (Bryn Mawr).

1977. Juergens, S. P. *Newman on the psychology of faith*. New York: Macmillan, 1928. Pp. xvii + 288. \$2.75.—While formal logic has for us a definite value, it is but a part of the function of the illative sense which also serves us in a more intimate and fundamental way. It is this which abstracts and generalizes from facts of experience and gives us general notions. It spontaneously draws conclusions from only partly conscious premises and demands that particular propositions be given or denied assent. This sense, the discovery of which was Newman's greatest contribution to modern psychology, varies according to the individual, but is for each one his supreme and God-given guide. One who believes in God, and that God cannot lie, comes by the use of this sense to have a religious faith that is for him as certain as definitely perceived objects; a certainty which in Newman's case was enhanced by a visible Catholic Church to which God entrusted his commands. The genesis of faith in the individual and the sources of Newman's psychology of faith are the topics of the last two chapters. The book is replete with cross references and references to Newman's works.—J. P. Hylan (Stoneham, Mass.).

1978. Kittredge, G. L. *Witchcraft in old and New England*. Cambridge: Harvard Univ. Press, 1929. Pp. x + 641. \$6.00.—W. S. Hunter (Clark).

1979. Lasswell, H. D. *Types of political personalities*. *Publ. Amer. Sociol. Soc.*, 1927, 22, 159-169.—Political literature is analyzed for data about personality types. The characteristics of the agitator, the responsible party leader, and the "boss" are assembled. The complementary functions of the agitator and the responsible leader in a typical political event are illustrated. The formative effect of political patterns upon personality is illustrated in the demagogue, the "functionary" or bureaucrat, and the diplomat.—D. W. Willard (Clark).

1980. Li, C. *The formation of the Chinese people*. Cambridge: Harvard Univ. Press, 1928. Pp. 283.—The book is in eight chapters. The first is confined to a statement of the problem as a whole. To the evolution, expansion, and the characteristic of the so-called We-group, that is, the more typical Chinese, four chapters are devoted. The You-group, including such ethnical elements as the Mongol and the Tungus from the north and the Miao and the Yao from the south, takes up two more. The last chapter deals with the integration of the We- and You-groups into the modern Chinese people. Dr. Li's discussion on the physical traits of the modern Chinese is based mainly upon his own anthropometrical observations upon Chinese students in the Eastern colleges and universities of the United States of America and Cantonese laborers in Boston. He concludes that if the shape of the head is to be used as the best distinguishing trait, the modern Chinese are in part long-headed, in part round-headed, with the round-headed predominating; but they are mostly . . . mesocephalic. Of the long-headed, there are

two different types, one narrow-nosed, more prevalent in Shantung, and the other broadnosed, more prevalent in Kansu and Kwangsi. After having considered the movements of the different ethnical elements during historical times and their consequent intermingling, it is further concluded . . . that the original typical Chinese, the truly representative descendants of the Yellow Emperor, were roundheads with rather narrow noses, and that the present medium-headedness and medium-nosedness resulted, on the one hand, from an admixture of northern blood, notably that of the Tunguses, who were long-heads with also narrow noses; and on the other, from another admixture of the southern You-groups, which were either long-headed or round-headed, but all broad- or flat-nosed." Three approaches were adopted for discussing the evolution and expansion of the original Chinese. "One is to keep track of how the brick walls of the cities of the various provinces were one after another built. . . . A detailed statistical study of the number and age of such walls, living as well as abandoned, as far as ascertainable from the records, enables the author to affirm that Kansu is perhaps the oldest province that the Chinese people ever occupied, although at present not much Chinese blood is to be found in that province, and that Kweichow, on the other hand, is 'in every respect the youngest' of the provinces. The rest of the provinces come in between, the general order being from the northwest to the southeast and southwest." The second approach adopted is to pick out ten representative surnames and to trace their spread from their respective centers or groups of centers during the historical periods. To accomplish this, resort is of course had to genealogical and biographical records, which, fortunately, the Chinese stack-room contains in abundance. "The movement of the We-group before 206 B. C.," says Li in summary, "was limited to the north of the Youngtse; the southeastward movement was the dominant current up to 1280 A. D.; the southeastward currents were especially dominant during the periods 265 A. D.-618 A. D. and 906 A. D.-1280 A. D.; the southwestward movement began faintly about 206 B.C., and became dominant only after 1280 A. D." Yet another approach is through a study of the distribution of Chinese population during the different periods, based upon the official census covering 1500 years in all. The interesting point for us is that the three approaches agree in showing that the Chinese people spread from the northwest to the southeast and then southwest.—S. K. Chou (Stanford).

1981. Locke, A. The negro's contribution to American art and literature. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1928, 140, 234-247.—An outline of negro literature and music in America, with bibliography.—J. C. Spence (Clark).

1982. Löwenstein, O. Über die psychiatrische Begutachtung von Kindern und Jugendlichen und die Grenzen der geltenden Fürsorgegesetze. (The psychiatric examination of children and adolescents

and the limits of the laws concerned in providing for them.) *Allg. ärzt. Zsch. f. Psychotherap. u. psych. Hygiene*, 1929, 2, 11-24.—A critical treatment of the laws of Germany for youthful criminals.—D. E. Johannsen (Clark).

1983. Munro, T. Scientific method in aesthetics. New York: Norton, 1928. Pp. xi + 101.—The descriptive methods of science, if more broadly conceived than in the experimental esthetics of Fechner, could be profitably employed in the field of esthetics. Thus in the analysis of form, there is need of a more descriptive attitude in criticism, of greater attention to form in art, history, and "a comparison of examples from different media and different arts as opposed to the present over-specialized study." In the field of values, useful lines of investigation would include a systematic comparison of responses to identical forms and types of form; a correlation between diversities in responses to forms and age, environment, education, vocation, and special training in art; and an observation of the genetic development of responses to various forms.—D. Katz (Princeton).

1984. Murchison, C. Social psychology, the psychology of political domination. Worcester: Clark University Press, 1929. Pp. 210. \$3.50.—The basis of political life, the author holds, is to be sought not in such hypothetical factors in human nature as social instincts, but rather in the differences in abilities and opportunities of individuals. Social behavior patterns are regarded as variable in form though fairly constant in content. Examples of social behavior patterns, here considered, are those centering around birth control, control over the labor of others, international relations, community justice, and human rights. A brief criticism of such concepts in political philosophy as social contract theories, anarchy, socialism, democracy, and the Christian interpretation of political life follow. The last part of the book contains a discussion of some persistent hypotheses in social psychology including social forces, instincts, drives, and the group mind.—D. Katz (Princeton).

1985. Musil, A. The manners and customs of the Rwala Bedouins. New York: American Geographical Society, 1928. Pp. xiv + 712. \$8.00.—The Rwala are the only true Bedouin tribe of northern Arabia; they camp in an area having its center about 200 miles due east of Damascus, i.e., about half way between that city and Bagdad. The author, who has explored in Arabia for many years, is the intimate friend of the prince of the tribe, and was accorded unusual facilities for the collection of material. Chapters on the heavenly bodies and the weather, animals, omens, spirits and vows, supernatural gifts, and death and after death describe the relations to the universe. Daily life is described in chapters on the tent and its furnishings, food, dress and weapons, camels, and horses. The internal organization of the tribe is examined in chapters on the structure of

society, marriage customs, children, strangers in the camp, poetry, judicial procedure, protection of the oppressed, hospitality, personal qualities, vengeance, and laws of inheritance. Relations to other peoples are summarized in a long chapter on war and peace. Line drawings and photographs are used to describe pieces of equipment, etc., and there is a descriptive index and a portrait of the author. Transliterations (European system), translations, and explanations of the text of songs, common remarks, object names, etc., are given in detail.—R. R. Willoughby (Clark).

1986. Nathanson, Y. The musical ability of the negro. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1928, 140, 186-190.—“There is promise in the future of the negro in music as in other fields of endeavor, but we must not be led to conclude more at present than that there is no evidence to permit us to evaluate his musical ability as definitely inferior or superior to the musical talent of the Caucasian.”—J. C. Spence (Clark).

1987. Nelson, H. The creative years. *Amer. J. Psychol.*, 1928, 40, 303-311.—Answering Woodworth's statement that the period from twenty years up to forty seem most favorable to inventiveness, examples are cited of productivity past forty in artistic and scientific fields. Interest in the paper is added by the circumstance that the author thinks that its writing was directed by some intelligence outside her own.—E. R. Hilgard (Yale).

1988. Pan, Q. The meaning of national examination system. *China Critic*, 1928, 1, 512-515.—The Chinese of the pre-Confucian era already sufficiently appreciated the importance of singling out men of talent and of attainment. The transition from the recognition of the basic principle of social differentiation of Confucius, embodying as it did the honoring of the worthy in proper degrees, to the development of a system of civil selection occurred early in Han Dynasty when Tung Chungshu first proposed a fairly well organized system for “raising” the talented and virtuous from obscurity. This was a system of selection without competitive examination. “In 132 A. D., as a result of a petition sent by Chu Hsung, two different types of competitive examination were adopted, one on scholastic attainment in the classics to be taken by the literary class, and the other on the technique of handling official documents to be taken by those who were already serving in some minor official capacity. An age limit of forty was also set for the candidates, since it was stated in the Analects that ‘intellectual maturity is not attained until one is well approaching forty.’” A reversion to the old criteria of birth and personal estimate took place from the 3d century to the 7th. In 220 A. D., a period known as The Three Kingdoms, measures were taken to differentiate the population into nine classes, from the upper few of which talented men and experts were to be henceforth drawn. This system lasted until 600 A. D. and

lingered well into the first part of Tang Dynasty. It proved a great incentive to the development of genealogy as a branch of historical study. In 610 A. D., during the short-lived Sui Dynasty, the beginning of a selective system appeared, in which any successful candidate was for the first time designated the “Entered Scholar.” Important improvements during the great Tang Dynasty were, first, besides in literature, degrees in classics, law, or even mathematics or calligraphy were installed, the lines of knowledge running up to over fifty, and secondly, any aspirant for a degree might apply for examinations direct to the authorities concerned. “Early in the Sung Dynasty, the subjects for examination were again reduced to the classics and *belles lettres*. At one time a knowledge of the classics was made the sole requirement (1070 A. D.); but in addition the candidates were asked to express in formal writing opinions regarding the current political and economic policies of the government or future policies yet to be formulated. This bit of innovation was to last until the whole examination system was finally abolished in 1905. The changes effected during the Mongol, Ming, and the Manchu dynasties were largely in the nature of details.” The basic principle of the historical examination system was a sound one. The central and local governments were pretty closely knit so far as this matter of “raising” the worthy from the “Flower of Talent” to the “Han Lin” is concerned. The criteria were often narrow and hence destructive of initiative and originality. “Educational psychologists in the country have lately come to take interest in the nature of the so-called octopartite compositions, and have reached the conclusion that the ability to write such compositions properly would evince a fair measure of native intelligence and that mere memory of a wealth of bookish information would not avail the contestant. In short, the writing of such a composition is more comparable to intelligence testing than to information testing.” The sudden abolition of the national examination system in 1905 was quite a mistake, because it provided for no transition and the age-old social and political recognition of the prime importance of civil selection went out with it. The Examination Council of the Five-power system of Dr. Sun Yat-sen as inaugurated in the Nationalist Government cannot be identified with that of civil service to be found in England and in the United States. The Chinese historical system was principally educational and social. Civil service examinations pick men for jobs, but the old Chinese system picked them for their own sake. Personality was more important than the office. “Perhaps, each true to her national genius, modern America simply employs the competent and worthy, but gives them no distinction; England has seen fit to keep separate a system of civil service examination to do the employing and a Royal Society to do the honoring; but China contrived to combine both functions in a single institution.”—S. K. Chou (Stanford).



1989. **Pan, Q.** *Familism and the optimum family.* *China Critic*, 1928, 1, 387-389.—"The optimum family system proposes to correct the sociological shortcomings of the 'greater' and the biological ones of the 'smaller.' Both the 'greater' and the 'smaller' systems have certain characteristic educational values, and these the optimum system will prove proficient to preserve. In conclusion, it may be pointed out that our practical proposal is quite in line with the philosophy of familism. That the 'smaller family' is too individualistic is now generally admitted. But the 'greater family,' on the other hand, tends to be socialistic, and to assume the form and spirit of a minute state. This is why 'greater familism' tends to supplant patriotism. And in our opinion, neither the individualistic nor the socialistic tendency will insure national and racial welfare and prosperity."—*S. K. Chou* (Stanford).

1990. **Park, R. E.** *The bases of race prejudice.* *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1928, 140, 11-21.—"Prejudice is an attitude, and 'race prejudice is like class and caste prejudices—merely one variety of a species.' Regarded as a phenomenon of status, race prejudice becomes the resistance of social order to change. For example, the efforts of the negro to improve his position result in opposition, prejudice and animosity. Prejudices do not always express themselves in animosities; e.g., 'if the Negro were content to remain in a subordinate position to which the white man's prejudices—prejudices which have grown up through long and intimate association—assigned him, racial animosities would probably not exist.' Other reasons for difficulty between different races are racial instinctiveness, that is, the consciousness of difference which produces 'vague apprehension tinged with and qualified by curiosity' and antipathies, which are intensified by such characteristics as racial odor, arousing disgust in one not of that race."—*J. C. Spence* (Clark).

1991. **Peterson, J.** *Methods of investigating comparative abilities in races.* *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1928, 140, 178-185.—"The writer has become so skeptical of the results of group testing in race psychology that he is inclined to question all data so derived, and to recommend for race comparisons only individual tests of a nature and under conditions affording constant stimulation by the tester under standardized conditions." The author gives suggestions as to methods of race testing, and advances the belief that a race can best be tested by one of its own members, and that for that reason young negroes should be encouraged to obtain the necessary training for this work.—*J. C. Spence* (Clark).

1992. **Pillsbury, W. B., & Meader, C. L.** *The psychology of language.* New York: Appleton, 1928. Pp. vii + 306. \$3.00.—A discussion of some aspects of language, thought, and meaning from the point of view of a psychophysical interactionism. In the eight chapters contributed by Pillsbury there is a recapitulation of the elementary facts and theories

concerning the nervous system, the sense organs, sensation, perception, memory, association, imagery, etc., and a discussion of meaning and thought. It is assumed that "man thinks first and then expresses his thought in words, by some sort of translation. To understand this, it is necessary to know how words present themselves in the consciousness of the individual, how they are related to ideas of another type than the verbal, how the ideas originate and how they arouse the words as images, how the movements of speech are evoked by these ideas, and finally how the listener or reader translates the words that he hears or the words that he sees into thoughts of his own" (p. 92). Concerning meaning and thought, it is said that "the essence of all thought processes is to be found in the fact of meaning. Meaning in its turn is due to the associations that are aroused by the mental content or, when associations are not fully aroused, by the partially open association paths" (p. 184). "Thinking may go on in words or in images equally well, but that which makes both images and words capable of carrying thought is not their peculiar structure but their reference, and the reference in either case is not to other words or images, but to types, to organized experiences, and to their representatives" (p. 182). "All considerations make it probable that the so-called imageless thought is a development or degeneration from thinking in images, and that the images may in many cases be present but be overlooked owing to their vagueness or to the interest in the meaning or the reference" (p. 184). Meader contributes an introductory chapter, one on the "speech organs," and two chapters on sound changes and linguistic categories and syntax. Bibliography and documentation are limited to a few of the more obvious references appended to the chapters and a few scattered foot-note references.—*E. A. Esper* (Washington).

1993. **Reckless, W. C.** *A sociological clinic for the study of juvenile delinquency.* *Publ. Amer. Sociol. Soc.*, 1927, 22, 187-195.—The sociological clinic as established at Vanderbilt University is an instrument of research, as opposed to clinics for diagnosis and treatment, and it limits its intake to conform with high standards of research. With a student-faculty personnel, it adapts the methods and materials of other clinics to its special purposes. Its theory of delinquency shapes its case method somewhat. Delinquent behavior is a product of interaction between an objective situation (the child's "real" world), and a subjective situation (the child's ideal construction of his social rôle and his situation). The record thus describes these two types of phenomena. Experience has demonstrated the value of a verbatim report of interviews seeking subjective data, but favors a short, concise case study as opposed to exhaustive and detailed analysis of cases. There is a point of diminishing returns in the scope of data to be gathered having significance to the research student.—*D. W. Willard* (Clark).

1994. Rice, S. A., & Waller, W. **Stereotypes.** *Publ. Amer. Sociol. Soc.*, 1927, 22, 180-186.—Varying groups of students were asked to identify pictures of individuals not known to them by name, as to occupation or social position. They were also asked to rate these persons as to intelligence and craftiness. The experiment was repeated after the identity of the individuals pictured was known to all. As a result, three conclusions were possible from a statistical treatment of the data: (1) Stereotypes exist and can be measured. (2) The characteristics of stereotypes are occupational characteristics. (3) Personal traits such as intelligence and craftiness which are attributed to persons are linked up chiefly with occupational identity. The importance of the study of the number, character, and genesis of prevalent stereotypes is emphasized.—D. W. Willard (Clark).

1995. Schorn, M. **Untersuchungen zur Kritik der graphologischen Gutachten.** (Critical investigations of graphological judgments.) *Indus. Psychotechn.*, 1927, 4, 359-368.—Samples of one person's handwriting were judged independently by five graphologists. A detailed comparison of the judgments shows little or no agreement among them beyond what may be readily accounted for without accepting the systems.—A. W. Kornhauser (Chicago).

1996. Seashore, C. E. **Three new approaches to the study of negro music.** *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1928, 140, 191-192.—Phonophotography permits the reproduction of music, wave by wave, giving a basis for detailed scientific analysis; with an adequate collection of samples of singing, we can measure the specific traits and talents by means of over two score instruments and methods for such measurements; and as a result of this new evidence there has been made possible an analysis of the musical mind through the fundamental attributes; the tonal talents, the temporal talents and the dynamic talents.—J. C. Spence (Clark).

1997. Shaw, C. R. **Correlation of rate of juvenile delinquency with certain indices of community organization and disorganization.** *Publ. Amer. Sociol. Soc.*, 1927, 22, 174-178.—The indices of community organization and disorganization correlated with delinquency are family dependency, population mobility, nativity, and number of families owning their own homes. These are all found to be significantly associated with delinquency, as found in Chicago. Areas of the city located along radial axes originating in the center of the city—the Loop District—yielded varying degrees of correlation, and the above factors were found to be consistently associated with community types as defined by earlier ecological descriptions of the city and its growth.—D. W. Willard (Clark).

1998. Blawson, J. **Causal relations in delinquency research.** *Publ. Amer. Sociol. Soc.*, 1927, 22, 169-174.—Determination of causes of anti-social behavior is best made by the statistical method as

opposed to the prevalent case analysis. Success with the statistical method rests upon objectivity of data about cases and the possibility of comparing these data with norms of behavior in non-delinquent populations so selected as to eliminate from results the influence of non-causal factors. Thus, low intelligence and delinquency are found to be associated, but the association sinks to insignificance when the non-delinquent population is made up of persons of similar economic and social status. The method of partial correlation and the use of the regression equation may be most effective in showing the relative weights of various factors causing delinquent behavior. Case work data should be made increasingly objective in character for purposes of statistical treatment.—D. W. Willard (Clark).

1999. Stinchfield, S. M. **Speech pathology with methods in speech correction.** Boston: Expression, 1928. Pp. xiii + 266. \$3.50.—The first chapter is devoted to speech defects as a special handicap. The second chapter points out the confusion of terminology in the literature and suggests a working classification with common terminology. The next two chapters are concerned with social maladjustment, neurosis and subnormality, and the relation that defective speech sometimes bears to these. One chapter describes the Blanton-Stinchfield Speech Measurements, which are divided into two parts, one requiring subjective judgments by the examiner and the other involving an objective measure of performance. The remainder of the book and the supplement are devoted to principles of correction and drills and exercises for that purpose. There is an index and most of the chapters have bibliographies.—M. N. Crook (Clark).

2000. Stinchfield, S. M. **The psychology of speech.** Boston: Expression, 1928. Pp. ix + 331. \$3.75.—The first chapter is devoted to the phylogenetic development of language. Facts are presented on the language of apes and the theory is favored that the appearance of language is consequent on the development of the forebrain. In the second chapter it is pointed out that language in children appears first as emotional expression which gradually takes on the form of a symbolic vocabulary, and the elimination of speech defects is discussed. Fairly complete chapters are devoted to the physiological bases for speech and the sensory and motor areas of the brain. Difficult sounds in the English language are described in detail and the foreign nationalities for which each affords special difficulty are indicated. A number of phonetic exercises are given. Five chapters, amply illustrated with literary quotations, are devoted to the more complex faculties and personality. In the last chapter is described the Blanton-Stinchfield Speech Measurements, which consist of two parts: (1) a subjective rating by the examiner of the subject's vocal quality, pitch, time elements, enunciation, behavior characteristics, and special handicaps or spe-

cial abilities; (2) an objective rating of articulation, reading and speech rates, and scope and use of vocabulary. A complete bibliography accompanies each chapter.—*M. N. Crook* (Clark).

2001. Tait, W. D. A social aspect of behaviorism. *J. Abn. & Soc. Psychol.*, 1928, 23, 397-399.—The author believes it will be impossible to change all of human nature by the mere change of environment.—*C. H. Johnson* (Boston Psychopathic Hospital).

2002. Thompson, C. H. The educational achievements of negro children. *Ann. Amer. Acad. Pol. & Soc. Sci.*, 1928, 140, 193-208.—The author believes that the present tests measure not native but acquired ability, and hence are not suited to the measurement of negro intelligence. He proposes to ascribe differences to environment rather than heredity, when that interpretation is logical; in fact he believes that environment is the chief cause of the variation in the achievement of white and negro children in mental and scholastic tests. Discussion with tables.—*J. C. Spence* (Clark).

2003. Watson, G. B. Do groups think more efficiently than individuals? *J. Abn. & Soc. Psychol.*, 1928, 23, 328-336.—The product of group thinking is distinctly superior to that of the average and even that of the best member of the group. In most cases, with a simple task, a division among individuals and a summation would give a better product than is obtained by cooperative group discussion. Groups are more alike than random, or even average, individuals chosen from those groups. The larger the group, within the range from three to ten, here studied, the more superior the group product becomes. Group production is a matter so different from individual production in the same field that one is practically no index of the other. Most of the factors that make for efficient work as a member of a group lie outside the range of the things we are doing in education to equip individuals to do tasks themselves.—*C. H. Johnson* (Boston Psychopathic Hospital).

2004. Wile, I. S. Lying as a social phenomenon. *Arch. Neur. & Psychiat.*, 1928, 20, 1,284-1,311.—The author seeks a rational explanation for the prevalence of lying and the attitude of society towards its general appearance and varied manifestations. As lying is undoubtedly an outgrowth of individual biologic needs, it advances one's personality, but also threatens him; and so for the preservation of group relationships, lying is frowned upon. The urge to lie also arises from the social plane. It has its social value—society has not hesitated to utilize the lie as a form of society strategy possessing definite survival values. A discussion follows as to the relation between the individual and social mind, neither being regarded as an entity, but the individual mind as being integrated to a large extent with the social relationships in which it is only in partial contact, consciously and unconsciously. With

the young it is the struggle for the preservation of self that brings about the conflict with social relationships, and lying constitutes part of the combat for the preservation of individuality during the time that social relationships are slowly being established and accepted. Lying continues throughout life, but it is modified because of social requirements in order that individual conduct may be acceptable in terms of the group norm of conduct. Social lying should be interpreted ethically as well as socially. If morality is not inherited biologically, then the social guidances, standards, and practices determine the status of lying. Lying is then recognized by society as a form of conduct which promotes the adaptation of man to his environment.—*E. C. Whitman* (Boston Psychopathic Hospital).

2005. Witty, P. A., & Lehman, H. C. Religious leadership and stability. *Psychol. Rev.*, 1929, 36, 56-82.—Religious history records many unstable beings tortured into frenzy by persistent obsessions. The writers do not go so far as to assert with James that religious genius is invariably accompanied by nervous disturbance; however, they believe after a study of religious leaders (Luther, Bunyan, Tolstoy, and other leaders are discussed in detail) that religion has operated as an intensely satisfying avenue of escape from mental stress. They believe that in so far as the religious genius is concerned the eccentricity of genius, denied by some, is not wholly a myth.—*H. Helson* (Bryn Mawr).

[See also abstracts 1778, 1849, 1860, 1875, 1906, 1910, 1917, 1933, 2007, 2035, 2050, 2055, 2065, 2079, 2106.]

## INDUSTRIAL AND PERSONNEL PROBLEMS

2006. [Anon.] Information and data regarding tests in short-answer form. *Pub. Pers. Stud.*, 1929, 7, 3-4.—(1) Distributions of scores, mean and medians are given for probation officer test given to 68 applicants to the Cleveland Civil Service. A wide scatter of scores and a mean lower than expected are noted. (2) As a result of testing 122 applicants to the Milwaukee Civil Service Commission for automobile mechanic ratings, distribution, mean and median scores are listed for the Bureau of Public Personnel Administration test for automobile mechanics and for the Stenquist mechanical aptitude test. A narrow range of scores on the automobile mechanic test and a high mean score on the Stenquist are mentioned. Correlation between the two sets of scores was  $.43 \pm .055$ .—*K. M. Cowdery* (Stanford).

2007. Bingham, W. V. Personality and public accidents—a study of accident-prone drivers. *Repr. & Cir. Ser. Person. Res. Fed.*, No. 18. (Reprinted from Trans. 17th Ann. Safety Cong., Nat. Safety Coun., 1928, 3.) \$0.20.—The author emphasizes the need for systematic recording and analysis of accidents occurring among accident-prone drivers of public vehicles, some of whom have only temporary



handicaps (e.g., lack of skill), and others of whom are constitutionally unfit (because of physiological defects such as slow or irregular reaction time). Study, diagnosis and treatment of 181 high-accident men was made, and detailed analysis of causal factors in accident-proneness among 160 of these men is reported, showing the percentage of various defects found. Contemporary publications and investigations of similar nature are mentioned.—G. L. Barclay (Illinois).

2008. Bramesfeld, E., & Eberle, E. *Zur Psychologie des Praktikerurteils*. (The psychology of practical judgment.) *Indus. Psychotechn.*, 1927, 4, 302-306.—Sources of error in judging men, with special reference to apprentices, are mentioned. Judgments should be analytical, with separate estimates of different qualities. Tests should be checked only against the judgments pertaining strictly to elements of vocational fitness.—A. W. Kornhauser (Chicago).

2009. Bramesfeld, E., & Taubeneck, H. *Erfolgskontrollen über psychotechnische Eignungsprüfungen*. (Follow-up studies of psychotechnical tests of fitness.) *Indus. Psychotechn.*, 1927, 4, 321-343.—The study is based upon the test results of young persons entering industry. The intercorrelations among some 30 tests show interesting relationships and make possible the selection of a short examination (seven tests) which correlates .88 with the complete examination. A study of the change of scores when the tests are repeated after a year or two shows great consistency for the complete examination and for general and "practical" intelligence, only moderate consistency for motor tests, and extremely little consistency for sensory tests. Composite test scores were also checked against a merit rating based on qualities manifested in actual work. The comparison shows the tests "useful for practical purposes." The separate tests which give the best agreement with ratings are the same as those chosen on the basis of the test intercorrelations.—A. W. Kornhauser (Chicago).

2010. Bureau of Public Personnel Administration Staff. *Suggested tests for medical social worker*. *Pub. Pers. Stud.*, 1929, 7, 8-18.—For the selection of qualified medical social service workers with salaries beginning at from \$1,200 to \$1,800, a series of tests is suggested (as yet unstandardized) which proposes to measure memory of oral directions; theory, methods, work and terms; social service situations and their solution; and social intelligence. To supplement the objective tests an interview to evaluate personality traits such as speech, dress, carriage, and total personality effect is recommended as well as a qualifying physical examination.—K. M. Cowdery (Stanford).

2011. Bureau of Public Personnel Administration Staff. *What's wrong with service (efficiency) ratings?* *Pub. Pers. Stud.*, 1929, 7, 18-28.—Analy-

sis of data presented as to the validity and reliability of ratings of policemen and police women under varying conditions of control of ratings leads to the conclusion that the unreliability usually found is due to (1) the inability of the rating officer to hold in his mind at one time all of the pertinent facts in his possession which might affect the ratings; (2) the inability of the rating officer to evaluate and weigh, without some artificial scheme or aid, the facts in his possession which he can remember at one time; (3) "halo" effect, due to emotional factors, intellectual inadequacy on the part of the rater, and a reluctance on the part of most rating officers to make ratings at all. Properly chosen rating officers, provided with adequate forms and instructions, are able to give fairly reliable facts about the performance of employees, from which ratings can be made sufficiently reliable to be serviceable.—K. M. Cowdery (Stanford).

2012. Bureau of Public Personnel Administration Staff. *Suggested tests for dietician*. *Pub. Pers. Stud.*, 1929, 7, 29-35.—An unstandardized battery of tests is proposed to select dieticians for service in institutional positions. Short-answer form tests are to measure knowledge of purchase, proportion, values and sources of foods; situations involving dietetics; food costs and values; and social intelligence. As supplements to the battery an evaluation of personality traits and impression by means of an interview, data on education, experience and physical conditions are listed.—K. M. Cowdery (Stanford).

2013. Drill, B. *Eignungsprüfung für die kommunale Feuerwehr*. (Aptitude tests for the municipal fire department.) *Indus. Psychotechn.*, 1927, 4, 289-301.—The author describes tests developed for selecting firemen in Riga. Some 30 tests requiring four hours were given to 51 candidates, of whom 23 were selected and reported on at the end of nine months. The combined test scores correlated .91 with the ranking of the men by the fire chief. Among the especially successful tests were those for muscular strength, speed, coordination and endurance, and two practical tests, one requiring mounting a scaffold and the other finding a signal in a smoke-filled room.—A. W. Kornhauser (Chicago).

2014. Giese, F. *Die menschliche Seite der technischen Arbeit*. (The human side of technical work.) *Indus. Psychotechn.*, 1927, 4, 379-384.—Some attention to the human problems of industry may be found in the older economic and social studies, but the recent development of industrial psychology has added a great deal. There is now need for more comprehensive and theoretically satisfactory formulations. A twofold division of the field is suggested: (1) from the standpoint of the industrial organization, and (2) from the standpoint of subjective relationships to technical work. The former includes selection and placement, training and adjustment, improvement of work methods and conditions, and the psychology of selling. The latter includes questions of individual

subjective adjustment to vocations, matters of collective psychology of workers, and broad problems of social psychology.—A. W. Kornhauser (Chicago).

2015. **Johnen, K.** *Das Klavierspiel in arbeits-technischer Beleuchtung.* (Piano playing in the light of work technique.) *Indus. Psychotechn.*, 1928, 5, 20-25.—In piano playing the student should learn to move the body and to breathe in rhythm with the music, both for the sake of health and comfort and for effectiveness in performance. A sample set of curves from the writer's investigations is given, with records of bodily oscillations, breathing, and muscular contractions of the arms. A full report of the work is published in *Neue Wege zur Energetik des Klavierspiels*, Amsterdam, H. J. Paris.—A. W. Kornhauser (Chicago).

2016. **Kellner, H.** *Neun Jahre Prüferfahrungen in der Berliner Metallindustrie.* (Nine years of testing in the Berlin metal industry.) *Indus. Psychotechn.*, 1928, 5, 33-48.—Figures are presented to show the relationship of workshop performance to records of school marks, to the kind of school attended, and to the occupational class of the father. In all instances a significant but not close relationship is apparent. The author briefly describes certain features of the development and use of psychological tests for apprentices in the metal-working industry of Berlin, mentions previously published results, and cites favorable recent findings of eight or ten concerns. Proficiency tests of apprentices over a period of several years showed that a superior, a middle, and an inferior group retained their relative positions. The author estimates the financial saving produced by tests.—A. W. Kornhauser (Chicago).

2017. **Knoop, W.** *Die Eignungsprüfung der Beamtinnen für die Autoruf A.-G.* (Aptitude testing of office girls for the Autoruf Co.) *Indus. Psychotechn.*, 1928, 5, 143-146.—A series of tests given to 125 candidates for positions in taxicab call-stations is described and intercorrelations are presented. Fair agreement was found between test scores and ratings of performance by the management ( $N = 24$ ).—A. W. Kornhauser (Chicago).

2018. **Lahy, J. M.** *Le facteur psychologique dans la construction des machines à écrire.* (The psychological factor in the construction of typewriters.) *Année psychol.*, 1927, 28, 245-247.—The author believes that existing typewriters should be studied with a view to better adapting them to the psychological characteristics of the typist.—N. L. Munn (Clark).

2019. **Lehmann, H.** *Zur Kritik der Bewegungsstudien von Gilbreth.* (Critique of Gilbreth's motion studies.) *Indus. Psychotechn.*, 1927, 4, 306-314.—Gilbreth's detailed studies of bricklaying are described and in the main approved. His methods are considered too elaborate for most practical work, however, and his procedure is held to create unfavorable attitudes among the workers.—A. W. Kornhauser (Chicago).

2020. **Loeffler, J.** *Leistungssteigerung durch Verbesserung der Arbeitstechnik in einem chemischen Fabrikbetrieb.* (Increase of output through improvement in work technique in a chemical industry.) *Indus. Psychotechn.*, 1928, 5, 49-53.—A marked increase in production was achieved in a chemical factory by means of time studies, reorganization of the work, and introduction of a premium system of wage payment.—A. W. Kornhauser (Chicago).

2021. **Lossagk, H.** *Stückzeitschwankungen und Zeitzuschläge bei der Vorschätzung der Leistung für Handarbeit mit kleiner Grundzeit.* (Unit time variations and time additions in the evaluating of performance in the case of manual work with short basic time.) *Indus. Psychotechn.*, 1927, 4, 257-270.—Experiments with hand-work and simple intellectual work in the laboratory and in industry agreed in showing a consistent relationship between variations in the time used in performing a task and the basic time required for the task. On the basis of the results, the author criticizes and amends Barth's conclusions concerning allowances to be made in setting times in the case of very short manual tasks.—A. W. Kornhauser (Chicago).

2022. **Lossagk, H.** *Werkstück- und Werkzeuggriffe bei verschiedenen Arbeitsweisen.* (The holding of work material and tools in different methods of work.) *Indus. Psychotechn.*, 1928, 5, 1-15.—Laboratory studies were conducted on a specially devised assembly-job in order to discover the effects of certain variations in the manner of work. The work was done either in a continuous series of operations on one piece (*Mehrartarbeit*) or in a repetition of each operation on many pieces (*Einarbeit*). These methods of work were compared when one hand was used and when both hands were used. The investigator also varied the extent to which tools were employed. In general *Mehrartarbeit* was superior. Where one hand was used *Mehrartarbeit* was the more advantageous when tools were less used and when the work was less handled. Where both hands were used, *Mehrartarbeit* was even more advantageous and (in contrast to the work with one hand) the more advantageous the more tools were employed. Other experiments dealt with the number of pieces advantageously worked on as part of one "work-impulse." Exploratory experiments are also reported attempting to parallel these for hand-work with similar ones for intellectual work.—A. W. Kornhauser (Chicago).

2023. **Marbe, K.** *Psychotechnische und faktische Eignung.* (Psychotechnical and actual fitness.) *Indus. Psychotechn.*, 1928, 5, 16-20.—Fitness as measured by psychological tests often differs from actual fitness in an occupation, due, for example, to the influence of age and experience. Agreement between tests and later performance is often unexpectedly great when one considers the changes that occur between testing and follow-up. Results are

eited from a study of children over a period of years to show the tendency of the older children to remain slightly superior to the younger.—A. W. Kornhauser (Chicago).

2024. May, S. C. University training for public officials. *Pub. Pers. Stud.*, 1928, 6, 238-240.—In view of the growth of a real science of public service the universities are faced with a challenge to provide a more highly developed training for such service, to include not only some of the broad general principles already taught as political science but also more practical courses to train in the techniques involved in holding and properly executing the duties of public office.—K. M. Cowdery (Stanford).

2025. Moede, W. Die Psychotechnik als Arbeitswirtschaft. (Psychotechnics as the economics of work.) *Indus. Psychotechn.*, 1927, 4, 347-349.—Psychotechnics aims not at psychological or technical, but at economic accomplishment. It is of central importance not only for the worker and the business unit but also for industry as a whole.—A. W. Kornhauser (Chicago).

2026. Moisescu, M. Rationalisierung des Verpackens. (Rationale of packing.) *Indus. Psychotechn.*, 1928, 5, 158-159.—The writer reports a piece of work of L. Walther in effecting marked improvement in coffee packing through better placement of workers, change of work process, etc.—A. W. Kornhauser (Chicago).

2027. Olssen, P. G. Vilka fordringar ur hälsosynpunkt böra ställas på en person vilken önskar körkort som förare av motorfordon. (What requirements from the standpoint of health ought to be required of candidates for automobile driver's licenses.) *Svenska läkart.*, 1929, 26, 16-22.—Through a number of laws extending from 1906 to 1922 a series of restrictions have been laid down as conditions upon which drivers' licenses may be issued in Sweden. Up to 1923 candidates were required to submit certificates for absence of defects of vision or hearing, and such other defects as might incapacitate them as drivers. In 1923 the law was amended, modifying restrictions with reference to eyesight but adding some other defects as disqualifying, although it has been demonstrated that some of these in no way incapacitate even a professional chauffeur. No reference has been made to a number of diseases and defects which ought to disqualify. In view of the fact that a revision of the law is being contemplated the attention of the medical society is called to the following proposed additions to the existing law: Driver's licenses shall be unqualifiedly denied to the following classes: (1) those who suffer from aortal insufficiency, incompletely compensated heart failure, marked heightening of blood pressure or arteriosclerosis; (2) those who suffer from epilepsy; (3) those who show signs of organic disease of the central nervous system of which loss of the patellar reflex may be taken as an indication; (4) those who constantly or period-

ically suffer from vertigo, dizziness or any disturbance of the sense of balance; (5) those who have tendencies to sudden loss of consciousness; (6) those who suffer or have suffered from any mental disease. Positive and clear directions should be given examining physicians, who are to turn over results directly to the local government, not leaving them in the hands of the applicant as heretofore. Applicants who are rejected are not to be permitted to go to another physician, but may appeal their case to the state department of medicine. In the event that an already licensed person acquires one of the disqualifying diseases or defects his case must be reported by his physician to the local government in order that his driver's license may be revoked.—T. C. Pihlblad (Wittenberg).

2028. Prax, A. Das Werbewesen in der deutschen Glühlampenindustrie. (Advertising in the German electric light industry.) *Indus. Psychotechn.*, 1927, 4, 353-358.—The author describes the kinds of appeals used in early attempts to induce people to use electric lights in Germany and traces the more recent changes in the advertising.—A. W. Kornhauser (Chicago).

2029. Rubarth, B. Untersuchung zur Bestgestaltung von Handheften für Schraubenzieher und ähnliche Werkzeuge. (Investigation of the best form of handles for screw-drivers and similar tools.) *Indus. Psychotechn.*, 1928, 5, 129-142.—Handles of different shapes and sizes for screw-drivers and similar tools were studied comparatively in terms of actual performance. Methods of measuring performance and tables of results are given, dealing with the force and speed of the turning movement with different handles. A cylindrical handle with rounded end is found better than the usual forms.—A. W. Kornhauser (Chicago).

2030. Ruffer, W. Anlern-Erfolgskontrolle bei Osram. (Follow-up studies during training at Osram's.) *Indus. Psychotechn.*, 1928, 5, 86-94.—Records of the improvement in performance of 110 girls engaged in simple operations in a large electrical factory were compared with test ratings. Some degree of agreement is found. A little less agreement appears between the test scores and supervisors' ratings.—A. W. Kornhauser (Chicago).

2031. Stolley, G. Psychotechnische Eignungsprüfung der Schneiderin, Prüfverfahren und praktische Leistungskontrolle. (Psychotechnical tests of aptitude for dressmakers; test procedure and practical follow-up.) *Indus. Psychotechn.*, 1927, 4, 369-379.—A brief analysis is given of qualifications for the work and a set of 19 tests is described. The test scores were correlated with performance on a special proficiency test given to 34 girls who had from one to two and one-half years' training. The correlation coefficient was .60. Distinctly higher correlations are obtained through the use of selected tests, especially those of space perception and dexterity.—A. W. Kornhauser (Chicago).



2032. Ströer, H. **Vergleichsversuche an Rechenhilfsmitteln.** (Comparative investigations of calculating aids.) *Indus. Psychotechn.*, 1928, 5, 111-116.—Simple engineering calculations were performed with and without the use of short-cut charts. Except in extremely simple problems great saving of time and reduction of errors occur with the use of the calculating aids.—A. W. Kornhauser (Chicago).

2033. Verwoerd, H. F. 'n Bydrae tot die metodiek en probleemstellings vir die psigologiese ondersoek van koerante-advertensies. (A contribution to the methodology in and problems for the psychological investigation of newspaper advertisements.) *So. African J. Sci.*, 1928, 25, 469-480.—The use of introspection as a method for the experimental investigation of newspaper advertisements is discussed and demonstrated, reference being made to the many investigations where this was only apparently done. It is contended that one of the shortcomings of works on advertisement psychology is the mingling of statements which are proved by experimental investigation, with those which are merely illustrated by reference to the authors' personal impressions of particular advertisements. Examples are given of statements of the latter kind, which, although generally treated as proved in advertisement psychology, are shown to be at least doubtful by experiments in which introspective reports were obtained. The fact that the impression made by an advertisement seen separately differs from that made when it appears in an advertisement page leads to the suggestion that most of the accepted facts of advertisement psychology should be re-investigated with advertisement pages and not separate advertisements as material. An experimental method by which this is being attempted introspectively is described. Further problems are also discussed and preliminary results given, e.g., the influence on the apperception of a particular advertisement exerted by the ideational content of surrounding advertisements, etc. Attention is drawn to the desirability and possibility of the study of complex advertisements besides the customary investigation of simple ones.—E. Schoombee (Stellenbosch).

2034. von Foerster, J. **Verkaufskunst und Organisation im Einzelhandelsbetrieb.** (Selling skill and organization in retail business.) *Indus. Psychotechn.*, 1928, 5, 126-128; 147-158.—The writer reports in some detail a series of talks on problems and methods of organization and management in retail stores. Material is included on the psychology of selling, types of customers, advertising, etc.—A. W. Kornhauser (Chicago).

2035. Weber, W. **Die Tätigkeit des psychologischen Sachverständigen vor Gericht unter besonderer Berücksichtigung industrieller Verhältnisse.** (The activity of psychological experts in court proceedings, with special reference to industrial situations.) *Indus. Psychotechn.*, 1927, 4, 273-283.—The author stresses the important part psy-

chologists should play in industrial and commercial legal proceedings, and gives illustrations of instances where psychological testimony was needed rather than (or in addition to) that of a specialist in the field of work involved.—A. W. Kornhauser (Chicago).

[See also abstracts 1772, 1792, 1795, 1876, 1995, 2060, 2088, 2089.]

## CHILDHOOD AND ADOLESCENCE

2036. Boorman, R. W. **Developing personality in boys.** New York: Macmillan, 1929. Pp. xix + 257. \$2.50.—The program and curriculum in boys' work are thought of as belonging to the zone of interaction between the individual and his social setting. The criterion of success is the degree in which the boy is helped to fit into that social setting better and the growth in personality which is the outcome. Data taken from life histories, letters and diaries have been used as a source of study. At the close of each chapter are suggestions for study and research, the laboratories for study being the home, vacant lots, playgrounds, scout troops, etc.—R. Stone (Clark).

2037. Cosgrave, J. G. **The psychology of youth; a book for parents.** Garden City: Doubleday-Doran, 1929. Pp. 240. \$2.00.—W. S. Hunter (Clark).

2038. Elderton, E. M. **On the relative value of the factors which influence infant welfare.** Cambridge: University Press, 1928. Pp. 307.—This study consists of a careful analysis of a large amount of data gathered by medical officers of health and health visitors in 5 northern boroughs and in Birmingham. Correlations of infant mortality and of health of infants at one year with a number of hygienic and sociological factors were computed. Results show that health of mother is the most important single factor in infant mortality, while health of mother and maternal care as expressed in the habits of the mother, cleanliness of the home, and in ventilation, are the most important factors in the health of infants at one year. With these factors partialled out there is little evidence that economic status, occupation of father, employment of mother, type of housing, or indoor or outdoor sanitation is significantly associated with either infant mortality or health. The infant death rate is closely associated with health of infants at birth. Bottle-fed babies do not seem to be at a disadvantage except possibly from diarrhoea and digestive troubles in hot summers. Cleanliness of home and food does not seem to affect the health of children beyond one year of age. Tables and charts present the data in detail.—M. N. Crook (Clark).

2039. Eljasch, M. **Neue Abstraktionsversuche bei vorschulpflichtigen Kindern.** (New abstraction-experiments on pre-school children.) *Zsch. f. Psychol.*, 1927, 105, 1-42.—Confirms the finding of Katz

that the majority of children between 3 and 7 years, when confronted with the task of matching geometric figures, match them on the basis of similarity in color. "This predominance of color is found no matter whether size or form is the competing characteristic of the objects to be compared." But in form board tests the majority of children choose on the basis of form.—*H. Klüver* (Institute for Juvenile Research).

2040. Estabrooks, G. H. Intelligence and pigmentation of hair and eyes in elementary school children. *Amer. J. Psychol.*, 1929, 41, 106-108.—An experiment to prove that the correlation between the pigmentation of the hair and eyes and intelligence, which was found in an earlier study, is spurious.—*D. E. Johannsen* (Clark).

2041. Ferrière, A. *El alma del niño a la luz de la ciencia.* (The soul of the child in the light of science.) Madrid: Bruno Del Amo, 1928. Pp. 188.—The book is written from the genetic point of view. The work is divided into five parts: (1) The problems of genetic psychology and its application to education and social economy. (2) The biogenetic law and education. (3) Psychological types in infancy and race. Their classification and psychotherapy. (4) The school of the future. (5) The league of new education. In the fourth part the author pictures a school of the future with scientific methods and socialized procedure.—*J. W. Nagge* (Clark).

2042. Furfey, P. H. Pubescence and play behavior. *Amer. J. Psychol.*, 1929, 41, 109-111.—From an analysis of the results of a test purporting to determine boys' preferences in play activities at certain ages, it is found that there is a sudden loss of interest in certain of these activities at puberty.—*D. E. Johannsen* (Clark).

2043. Gruenberg, S. Parents as interpreters in a changing world. *Child Stud.*, 1929, 6, 117-119.—Parents provide the earliest and most continuous influence to which children are subjected. The home must maintain definite standards which are lived rather than taught, and the child should be directed in conscious striving toward these ideals.—*M. P. Montgomery* (Faribault, Minn.).

2044. Hoefer, C., & Hardy, M. C. Later development of breast fed and artificially fed infants. *J. Amer. Med. Asso.*, 1929, 92, 615-619.—An analysis of the infant feeding history of 383 elementary school children showed that children who were artificially fed are, on the whole, inferior physically and mentally to the breast fed. The artificially fed children rank lowest in all physical traits measured except height, have the poorest nutritional indices, are the most susceptible to childhood diseases, are slowest in learning to walk and talk, and rank next to the lowest in mental development, the lowest being those breast fed from 10 to 20 months. Children who were breast fed from 4 to 9 months are definitely

superior physically and mentally to all other groups. Children who were fed exclusively on breast milk longer than 9 months are mentally the poorest of all groups. As the length of the nursing period increases above 9 months there is a progressive decrease in the intelligence ratings.—*G. J. Rich* (Bellevue Hospital).

2045. Kenyon, J. H., Hill, M. C., & Lincoln, E. Socializing the infant's routine. *Child Stud.*, 1929, 6, 112-116.—These three specialists agree that the variability of the human element should be constantly considered in adjusting the schedule to the child. There is a difference between intelligent and discriminating routine.—*M. P. Montgomery* (Faribault, Minn.).

2046. Lasker, B. Childhood prejudices. *Child Stud.*, 1929, 6, 107-109.—The attitudes acquired by children reflect their environment. Likes and dislikes are the result less of deliberate teaching than of the child's own observation. Open-mindedness is obtained by an emphasis on rationalized observation.—*M. P. Montgomery* (Faribault, Minn.).

2047. Lippman, H. S. Restlessness in infancy. *J. Amer. Med. Asso.*, 1928, 91, 1,848-1,851.—Restlessness and muscular hypertonicity in infancy are due to autonomic imbalance with hyperactivity of the cranio-sacral division. The condition often disappears with the use of atropine.—*G. J. Rich* (Bellevue Hospital).

2048. Lipshutz, S., & McNally, L. Lester: a study in diagnostic teaching. *Psychol. Clin.*, 1928, 17, 204-209.—The case of a boy who could read with the most remarkable facility but could not spell. He saw words without being aware of their component parts. The methods used in teaching the boy to spell are described.—*J. T. Metcalf* (Vermont).

2049. McIlvaine, K. A., & Easby, C. Buster. *Psychol. Clin.*, 1928, 17, 214-216.—A child of slightly superior intelligence was given individual instruction for one hour a day for three months. In this way he covered as much ground as other children of his age do in the regular five hours of class instruction. His social adjustment was looked after in a play hour.—*J. T. Metcalf* (Vermont).

2050. Meyer, H. H. Child nature and nurture, according to Nicolaus Ludwig von Zinzendorf. New York: Abingdon, 1928. Pp. 229. \$2.50.—Nicolaus Ludwig von Zinzendorf (1700-60) of Saxony, the founder, patron and bishop of the reorganized Moravian Church, was regarded by Isaac Watts and John Wesley as an honored contemporary. He was a Christian mystic who sought for himself and taught others to acquire conscious unbroken experience of communion with Christ as the one sufficient evidence of divine life in the soul. Pedagogically, Zinzendorf was an immediate forerunner of Herbart and Froebel. His first catechism for little children, or "pure milk" of the the teachings concerning Jesus illustrate the simple, kindly way in which he ap-

proached children. The questions and answers are simple, intimate, and begin with that which is the nearest and most real to the child. He advocated spontaneous self-expression and play as essential to moral growth, while adult influence should be mainly by example. At a time when religion was practiced with an almost savage severity, and infant damnation was a matter of popular belief, he assumed as his starting point of educational theory that the original state of the child was one of innocence. The aim of religious nurture was the preservation of this innocence and the development of thought and word and deed into the likeness of the Savior. A Christian home was the first requirement. When old enough to be taught, children were brought by their mothers each Sunday for singing, prayer and conversation about Jesus. When slightly older, they were formed into a children's choir and told stories about Jesus, learning about him as a Friend, Protector, and Helper of children. Choir groups were graded and boys and girls promoted according to age and given suitable religious instruction. In the school room up to the age of fifteen the first two hours each morning were devoted to religious instruction of a devotional nature. The Bible and hymns were used for teaching reading. Outside of school there was a variety of religious services: morning and evening worship, week-day and Sunday children's hour, and class meetings. Stimulating though this environment must have been, Zinzendorf did not believe in forcing religious experience upon children, and regarded child conversion as a spiritual convulsion.—*J. P. Hyland* (Stoneham, Mass.).

2051. **Murphy, M.** *Tommy: preliminary report on a superior child.* *Psychol. Clin.*, 1928, 17, 184-189.—A child of superior intelligence was so afraid of making a false statement that his behavior, both in school and out, was seriously affected. Logic was of no avail in combating the condition.—*J. T. Metcalf* (Vermont).

2052. **Sherman, I. C.** *The effect of verbal suggestion upon perseverance.* *Psychol. Clin.*, 1928, 17, 210-213.—A study based upon the results of an experiment tried with 65 children from 6 to 16 years old. Verbal suggestion was found to be most effective with the youngest and oldest children of the group, and least effective in the intermediate ages.—*J. T. Metcalf* (Vermont).

2053. **Pratt, C.** *Children in their neighborhoods.* *Child Stud.*, 1929, 6, 110-112.—A child should be aided in becoming adjusted to his environment with a view of making him independent of such aid, and should be protected from social relations when his experience is not sufficient to enable him to make adjustment.—*M. P. Montgomery* (Faribault, Minn.).

2054. **Pyle, W. H.** *Training children.* New York: Century, 1929. Pp. ix + 206. \$1.75.—The book is designed entirely for parents, with the emphasis laid on the early training. The main purpose is "to

make clear that what the child becomes depends upon what he has at the beginning and upon the influences brought to bear upon him during the early years of his life." The author, in the first part of the book, deals with the principles of child training, while in the second part he is concerned with the practical application of these principles, where he asks such questions as "What are tantrums and how can a child be cured?" "How can a child be broken of the habit of running away?" and answers each in a short paragraph.—*E. B. Heim* (Price, Utah).

2055. **Sacks, M. L.** *Religious consciousness of late adolescence.* New York: Avon Press, 1928. Pp. vii + 441. \$4.00.—Book One: Relations between religion and the sciences, as biology, psychology, sociology; and between religion, philosophy, theology and morality. Religion has been the cause of many decided changes in civilization. This should be an impetus towards a better understanding of the basic principles underlying religion, the possible application of religion to modern life, and its potentialities in the development of realities. It cannot be divorced from science or vice versa. It represents a worldly whole and consists of the soul, science and the world. It must be recognized as a natural phenomenon which must be dealt with from every possible scientific point of view. Adolescence is preeminently the period of the rise of religious consciousness in the individual. Book Two: A case study in religious consciousness. Evaluation of questionnaire methods. Questionnaire given to about 800 males and females, ages from 13 to 57 years, with majority between 16 and 26. Questions such as: "What does religion mean to you?" "Do you think you were born with religious feeling, etc.?" "Did your understanding of religion undergo a change, from 12th to 14th to 16th years, etc.?" Individual treatment of responses, and typical responses given. Book Three: What are the colleges doing to satisfy the religious needs of late adolescents? Questionnaire sent to 52 colleges. Conclusions quite heterogeneous. 55 references to psychology of religion are appended.—*R. C. Travis* (Yale).

2056. **Schorn, M.** *Zur Psychologie des frühbegabten Kindes.* (On the psychology of the precocious child.) *Zsch. f. Psychol.*, 1928, 105, 302-316.—Study of a 4½-year-old girl with the mental age of 8 years.—*H. Klüver* (Institute for Juvenile Research).

2057. **Schroeder, P. L.** *Behavior difficulties in children associated with the results of birth trauma.* *J. Amer. Med. Asso.*, 1929, 92, 100-104.—Difficult labor tends to determine behavior problems which, however, are chiefly the result of mental retardation. Distractibility and hyperactivity are characteristic personality traits in birth traumas, but no behavior difficulty is specific. Children with cerebral birth injuries who do not develop palsies show the same mental retardation and behavior difficulties as those



who do, except for the specific effects of orthopedic handicap.—*G. J. Rich* (Bellevue Hospital).

2058. **Sherman, M.** The differentiation of emotional responses in infants. *J. Comp. Psychol.*, 1928, 8, 385-394.—This paper deals with an interpretation of the writer's previous experiments upon the emotional responses of children. The conclusion is reached that the emotional responses of the newborn infant to the types of stimuli employed in the previous experiments are undifferentiated, and that the success of the individual observer in recognizing and differentiating the emotional character of these responses is due to a knowledge of the causative stimulating conditions. Bodily movements were usually found to be directly proportional, in regard to intensity and duration, to the strength of the stimulating condition. The function of the bodily movements is evidently that of an attempt to adjust to a specific stimulating condition. The genesis of the specific emotional reactions of children and adults lies in the responses available to the newborn infant. Even in the earliest responses two types of reactions are noted: (1) that of rejecting the stimulus, and (2) that of accepting the stimulating condition. The conditioning of emotional responses goes on continually, and the reactions to specific stimulating conditions are often considerably altered with the increase of age and experience.—*C. H. Graham* (Clark).

[See also abstracts 1776, 1942, 2082.]

#### EDUCATIONAL PSYCHOLOGY

2059. **Branom, M. E.** The Branom practice tests in elementary geography. New York: Macmillan, 1928.—This is a series of 84 practice tests arranged in two parts. A graph for the record of individual achievement is given for each part.—*L. M. Harden* (Clark).

2060. **Bureau of Public Personnel Administration Staff.** Standardized tests of ability to use correct English. *Pub. Pers. Stud.*, 1928, 6, 241-250.—Designed to test ability to use correct English in the ordinary social, business and educational relationships, a battery is offered with separate tests of use of forms of words, correct or incorrect constructions, choice of sentences, choice of words, word order in sentences, application of rules of grammar, conventions observed in letter writing, meaning of words, and the history and conventions of the English language. After preliminary testing in a school of secretaries the revised battery was standardized on 1,628 persons, resulting in norms of medians and percentile levels for all grades from the 6th to college graduates, with the most satisfactory distributions and standards at the level of high school graduation. The reliability (odd vs. even items) for the full range represented is indicated by the coefficient .96. Testing time 40 minutes, scoring time 10 minutes per paper.—*K. M. Couderu* (Stanford).

2061. **Carreon, M. L.** The 1928 testing program. *Philippine Pub. Schools*, 1929, 2, 33-40.—This study is the second in a series on the central-academic-normal survey conducted by the General Office during the period from June to September, 1928. The first results of Form 2, Philippine Educational Achievement Tests, Series B, Reading, are presented in this article.—*Y. Silverman* (Clark).

2062. **Dvorak, A., & Rae, J. J.** A comparison of the achievement of superior children in segregated and unsegregated first-grade classes. *Elem. School J.*, 1929, 29, 380-387.—110 pupils in Caldwell, Idaho, were given three group tests of ability (intelligence and achievement); they were then ranked in order of their average percentile scores on the three tests. Two equivalent groups of 27 pupils each were selected from the upper two-thirds of the pupils. One group was "segregated" and the other entered the regular first grade. In May, five educational tests were given to both groups; the reliability of differences in scores was computed; and the chance that real differences obtained was ascertained mathematically. The authors conclude from a study of teaching methods in the various subjects and from the test results that when the methods and the materials of instruction are adapted to the abilities and educational needs of homogeneous groups, the results are positive.—*P. A. Witty* (Kansas).

2063. **English, H. B.** Bluffing in examinations. *Amer. J. Psychol.*, 1928, 40, 350.—Three questions involving knowledge about psychoterminality, sexagenarianism, and tests of nevirility, were inserted in an hour quiz in elementary psychology with instructions "Do not guess." Answers on the part of a third of the students showed at least that degree of bluffing.—*E. R. Hulgard* (Yale).

2064. **Fairbank, E. E.** Emotional control. *Amer. Phys. Educ. Rev.*, 1929, 34, 96-98.—An emotion is an unpremeditated, sweeping physical reaction, usually accompanied by what we call feeling or affect, and involving the visceral, sympathetic, and glandular systems. If we can direct and correct growth, why not direct and learn to control one of our most fundamental characteristics, the emotions? The child with tantrums or aggressiveness and tendency to "show off" is the one who is apt to create the greatest difficulty from the standpoint of the teacher, but one must look out for the quiet, sit-around child, who is good and obedient but timid and sensitive and who needs to be drawn out and encouraged.—*R. Stone* (Clark).

2065. **Franklin, S. P.** Measurement of the comprehensive difficulty of the precepts and parables of Jesus. *Univ. Iowa Stud.: Stud. Character*, 1928, 2, No. 1. Pp. 63.—18 precepts and 8 parables of Jesus were presented to about 800 children from grades 4 to 12 in public schools in Indiana. The children were required to choose from among a number of statements the one best expressing the meaning of a given precept or parable. Classification of pupils

was made on the basis of mental age determined by Haggerty Delta 2 and the Terman Group Test. The correlation between mental age and comprehension standing was  $.78 \pm .01$ , between two measures of comprehension of the same sayings and parables  $.61 \pm .08$ , and between percentage of correct responses at the different ages about .8. At age 8 there was about 43% comprehension and at age 16 about 94%. There was little improvement in comprehension between 8 and 11 years and between 13 and 16. Precepts were more difficult than the parables at all mental ages. Concrete material was understood about two or more years earlier than abstract material. Comprehension was relatively independent of regularity of attendance at Sunday school and church of pupils or parents.—*B. Wellman* (Iowa).

2066. Frear, F. D., & Coxe, W. W. *Clothing test*. Bloomington: Public School Publ. Co., 1929. Pp. 16.—On construction, care, and selection of clothing. One part of the test is true-false; one involves yes or no for answer; two, the choice of a correct statement from 3 given statements.—*M. Goodrie* (Clark).

2067. Gallup, G. H. *Best creative work in American high schools, 1927-1928*. Cedar Rapids, Ia.: Quill & Scroll Soc., 1928. Pp. 100. \$1.50.—*W. S. Hunter* (Clark).

2068. Greene, H. A., & Jorgensen, A. N. *The use and interpretation of educational tests*. New York: Longmans, Green, 1929. Pp. 411. \$3.20.—The authors have written an elementary textbook of the essential principles of measurement in education for the use of the classroom teacher, the supervisor, and those preparing to teach or supervise. It is a non-technical treatment of the subject with concrete illustrations. The chief purpose of educational tests, according to the writers, is to improve classroom instruction by means of the exact location, diagnosis, and remedy of individual difficulties in learning. The various kinds of educational tests are classified, illustrated, and evaluated. Their uses are given as (1) comparative, both within the school itself and with norms and standards, as (2) instructional for determining the efficiency of teaching, value of methods used, diagnosis of class and individual difficulties, and as (3) means of grading and guiding the pupil in accordance with his ability and special aptitudes. The practical problems involved in the use of informal objective tests as well as in the use of standardized tests are discussed and practical suggestions given. One chapter is devoted to an explanation of the most useful statistical methods and one appendix is composed of practical problems to be solved involving the methods explained. Special chapters are devoted to the diagnostic and remedial techniques of arithmetic, language, and reading. Selected references are given at the ends of the chapters, and in the appendix are lists of distributing agencies for tests, a classified list of tests and publishers, and a list of drill and remedial materials.—*M. B. Mitchell* (Radcliffe).

2069. Hammond, H. P., & Stoddard, G. D. *A study of placement examinations*. *Univ. Iowa Stud.: Stud. Educ.*, 1928, 4, No. 7. Pp. 59.—The Iowa Placement Examinations were used in a representative sampling of the engineering colleges of the country. From 1,300 to 8,000 students took the various tests. Entering students were found to possess a great range of aptitude and preparation, both for scholastic work in general and for specific subjects in general. There was considerable range in the median scores on the examinations reported by various institutions. The placement examinations appeared to be valid instruments for the prediction of scholastic achievement in college, the prediction being best for the highest ranking students and poorest for the students ranking near the middle of the group. They also appeared to furnish valid data for the sectioning of classes on the basis of ability. A summary of the contents of the tests, tables of raw data and an annotated bibliography are included in the study.—*B. Wellman* (Iowa).

2070. Henmon, V. A. C. *Some significant results of the modern foreign language study*. *J. Educ. Res.*, 1929, 19, 79-91.—Results of the three-year investigation undertaken by the Modern Foreign Language Study showing comparative results for the United States, England and Canada. The results of achievement tests for French vocabulary, grammar, silent reading and composition are given for the three countries. Certain aspects of prognosis tests are outlined.—*S. W. Fernberger* (Pennsylvania).

2071. Holaday, P. W. *The long-time effect of freshman counseling*. *School & Soc.*, 1929, 29, 234-236.—Those entering freshmen at the University of Iowa who fell in the lowest decile on the basis of the entrance qualifying examinations given in 1926 were divided into 2 parallel groups, one of which was carefully coached and counseled throughout one year, the other of which was not given this attention. Observation of the 2 groups for 3 years revealed that in comparison with the control group the experimental made a higher grade-point average as well as a better adjustment to university life, and was reduced less by the loss of members who were dropped from the university rolls for poor scholarship or who left the university because of discouragement.—*H. L. Koch* (Texas).

2072. Hutchinson, M. E. *College athletics and scholarship*. *School & Soc.*, 1929, 29, 151-152.—The male students entering Cornell University in 1922 and graduating in 1926 were divided into 2 groups; one composed of athletes (members of the varsity or freshman teams), and the other of the rest of the undergraduate men. The groups were compared with respect to the percentage of their members who attained degrees, were put on probation at some time, registered for hard courses, registered for easy courses, or hovered about the passing mark; the average number of years spent in college; the average number of hours of work carried; the average grade

made in the courses taken; and the average intelligence-test score. In practically all comparisons the athletes made the better showing, although the group differences were in general small. The participants in the various sports differed somewhat in intelligence and scholarship. Football men ranked rather high in intelligence and relatively low in scholarship, whereas track men ranked relatively high in both. The author does not attempt to generalize to other institutions or to other periods in the history of Cornell.—*H. L. Koch* (Texas).

2073. **Hutchinson, M. E.** *Hutchinson Latin grammar scale (A and B)*. Bloomington, Ill.: Pub. School Publ. Co., 1929.—A series of multiple choice tests, graded in difficulty, covering the use of nouns, pronouns, adjectives and verbs. Standards are being prepared. Record sheets, scoring keys and interpretations are given.—*L. M. Harden* (Clark).

2074. **Irmina, Sister M.** *The relative merits of the methods of subtraction*. *Cath. Univ. Amer., Educ. Res. Bull.*, 1928, 3, No. 9. Pp. 29.—The author summarizes the methods of the fundamental process of subtraction as follows: I. Subtractive: (1) decomposition, (2) equal addition. II. Additive: (1) decomposition, (2) equal addition. III. Complementary: (1) decomposition, (2) equal addition. These methods are illustrated with problems and procedure. The subtractive and additive methods are contrasted as presented in experimental data; the complementary method is dismissed "as no experimental data are available to show its merits." "The results of the experiments in every case were unfavorable to decomposition, whether it was combined with the additive or the subtractive method." Equal addition yielded better results both in speed and accuracy, when combined with any other method. It is a question whether the benefit is due to the equal addition, or inherent in the original additive or subtractive habits. Results of many experiments are questioned, since they were influenced by the retroactive inhibitions of former training. The evaluation of the methods should be checked by early and continuous training of four separate groups in the four methods. A brief bibliography.—*R. A. Brotemarkle* (Pennsylvania).

2075. **Keyser, C. J.** *A fundamental background*. *Teach. Coll. Rec.*, 1929, 30, 432-446.—An analysis and proposed definitions of mathematics and science. "(1) A mathematical proposition is an established hypothetical proposition; (2) a scientific proposition is an established categorical proposition; (3) regarded as an enterprise mathematics has for its aim the establishment of hypothetical propositions; (4) regarded as an enterprise science has for its aim the establishment of categorical propositions; (5) as a body of achievements mathematics is composed of all established hypothetical propositions and no others; (6) as a body of achievements science is composed of all established categorical propositions and no others."—*H. H. Remmers* (Purdue).

2076. **Kilzer, L. R., & Kirby, T. J.** *Inventory test for the mathematics of high school physics. Parts I and II*. Bloomington, Ill.: Pub. School Publ. Co., 1929.—"The purposes of this test are: (1) To point out to mathematics teachers those items in their subjects which are useful in high school physics, and to provide a means for testing the pupils on these items, (2) to assist the administration in guiding pupils in their choice of high school physics, (3) to provide an inventory test which may be given by the physics teacher during the first week of the course. (Although this test is not diagnostic in the strictest sense, it is valuable in pointing out many of the weak points and in indicating lines of attack for remedial work.)" The test is composed of problems involved in the mathematical processes used in five of the leading high school physics books. There are two parts of the tests, and in each the test items are arranged in order of difficulty as shown by scores made by 265 high school pupils. On the basis of these 265 scores the tentative edition of the test was revised and "the revised edition of the test was given to 262 pupils in six high schools. On the basis of data thus obtained, the reliability of the test as a whole was found to be  $.904 \pm .008$ ." Tentative norms are given.—*L. M. Harden* (Clark).

2077. **Koos, L. V.** *The questionnaire in education*. New York: Macmillan, 1928. Pp. vi + 178. \$1.25.—The author's aim has been to prepare a book of compact proportions that will be of interest and value to students of educational research and to educational workers who undertake questionnaire studies. Some issues in questionnaire investigations, the extent to which this method is used, the field of the questionnaire, the types of responses to questionnaires, and the criteria for the construction of questionnaires are discussed. There is a bibliography of 60 titles.—*Y. Silverman* (Clark).

2078. **Lenne, N. J., & Fee, I. B.** *Variability of individual performance*. *School & Soc.*, 1929, 29, 264-268.—The records of 135 seventh-grade pupils in the "Lenne Practice and Test Sheets" in arithmetical fundamentals were analyzed from the point of view of individual variability. In this trait startling differences were discovered, the mean variation of an individual's scores from his trend ranging from 0 to 70% of the latter. Among the least variable 10% of the students no one made a score below 79% of his highest score, while among the most variable 10% the chances were 1 to 6 that a student's score would be below 34% of his highest.—*H. L. Koch* (Texas).

2079. **Lightfoot, J. M.** *The study of a special class center*. *Psychol. Clin.*, 1928, 17, 190-199.—The special class center chosen for this survey was in a very poor part of Philadelphia. Of the 200 children examined 75 were white of low social level, and 125 were negroes. The median IQ was 64. Most of the children, though very low-grade mentally, are able to make money. Only about 10%



seem likely to become socially dependent. The results of the tests of memory span quite fail to bear out the supposition that negro children have long spans.—*J. T. Metcalf* (Vermont).

2080. **Monroe, M.** *Methods for diagnosis and treatment of cases of reading disability (based on the comparison of the reading performance of one hundred and twenty normal and one hundred and seventy-five retarded readers from the Iowa State Psychopathic Hospital).* *Genet. Psychol. Monog.*, 1928, 4, 335-456.—This study was designed to test the earlier observations that the reading of retarded readers and cases of so-called congenital word blindness were characterized by difficulty in discriminating between p and q, and b and d, by a tendency to reverse the sequence of letters within a word, by an unusual ability in mirror reading and by facility in mirror writing. 125 normal readers and 175 retarded readers were chosen for study. The two groups were equated as to school placement, chronological age and mental age. The reading skill of the retarded group was one full year behind the chronological age and mental age of the group. Data on reading errors are presented for each of the first four grades and classified under 12 headings. Statistically significant errors are given for each grade. It appears that confusion in orientation and reversals in direction of reading are important factors in reading disability. Experimental results of remedial measures aimed largely at correcting these two factors are presented. Data on mirror reading are also given.—*L. M. Harden* (Clark).

2081. **Morgan, M. E., Wait, W. T., & Dvorak, A.** *Seattle solid geometry test series.* Bloomington, Ill.: Pub. School Publ. Co., 1929.—“This test series for solid geometry, made up of 11 units, is designed to provide teachers with a system of objective tests for one semester's work, and to provide survey and research workers with two equivalent scales each designed to cover a semester's work. For the teacher there are provided nine objective tests, each covering a separate unit of work and designed to cover approximately two weeks' work, and an objective 'Final Examination' to cover the work of the 18 weeks of a semester. For the survey and research worker are provided a 'Preliminary Examination' and its equivalent the 'Final Examination,' mentioned above.” Approximately 400 scaled true-false items make up the series. Scoring on the nine sub-tests is based on the number of correct items, while for the final and preliminary tests the score is similar to the T-score. Norms and tentative grade standards based on 450 cases are given.—*L. M. Harden* (Clark).

2082. **Naumburg, M.** *The child and the world.* New York: Harcourt, Brace, 1928. Pp. xxiv + 328. \$3.50.—The book is a statement in dialogue form of the underlying philosophy and psychology of creative education, particularly as exemplified in the Walden School, which the author founded and

directed for many years. Four dialogues between the school psychologist and a mother and father give the abstract background, relating the activities of the school to the more important of the recent schools of psychology. The relations to conventional education are examined in dialogues between the director and an investigating school superintendent, a sociologist, two normal school students, and a university professor, also between a new-school teacher and a public-school teacher and between a group of the older boys and girls; the influence of the newer psychology is brought out in a discussion of the relative importance of emotional and physiological states between the new-school physician and an old-fashioned children's specialist. The director discusses the relations of art to life and education in dialogues with an artist and a stage producer. There is an introductory foreword on the purposes of education, and a selected bibliography of about 140 titles.—*R. R. Willoughby* (Clark).

2083. **Odell, C. W., & Herriott, M. E.** *Standard achievement test on principles of teaching in secondary schools, Form 2.* Bloomington, Ill.: Pub. School Publ. Co., 1929.—The test is composed of four sub-tests: (1) indicating the proper connections between phrases and statements given, (2) multiple choice tests, (3) correcting statements by crossing out words or writing in correct words, and (4) a completion test. Tentative standards are given based upon the scores of 662 teachers' college students.—*L. M. Harden* (Clark).

2084. **Reeder, E. H.** *Lessons in our schools, No. III. A lesson in science.* *Teach. Coll. Rec.*, 1929, 30, 425-433.—A report of the observation of a fourth grade science lesson, with comments on its strength and weakness from the standpoint of correct application of psychological principles.—*H. H. Remmers* (Purdue).

2085. **Rugg, H.** *The American experimental school.* *Teach. Coll. Rec.*, 1929, 30, 407-424.—The chief accomplishments of experimental schools are revealed in their radical innovations in administration, class management, and scholastic atmosphere. They have five distinctive characteristics: (1) the substitution of a diversified program of activities for academic subject matter; (2) proceeding upon the hypothesis that the tool subject skills—reading, writing, and arithmetic—should be postponed to the third or fourth school year; (3) the substitution of the artist's drawing-out environment for the coercive one; (4) the discovery of the significance of rhythmic action; and (5) utilization of the whole school as the necessary agency in the maximum development of the whole child. The chief defect of experimental schools is lack of scholarship on the part of the teachers, with consequent lack of planning, balance and design of curricula. Since education should be a process of preserving the social heritage and of the development of active, creative traits of the child, there is urgent need of psychological study of the

creative act and of the processes of assimilation. The teacher-artist and the scientific measurements expert must be combined. The current concept of analysis must give way to studies of the integrative process, a thesis which calls in question the assumptions of the S-R bond school except for certain skill processes. The findings of physiologists, *Gestalt* psychology, and the intuitive insight of the artist are opposed to this analytic approach. The psychological problem, then, is the study of *motive, attitude, meaning and judgment*. The method proposed is chiefly "total eye-witness study of child behavior" with only incidental aid from techniques of measurement. In the psychological study of the creative act tests and scales "will, in the future, continue seriously to retard the development of truly creative processes in our schools."—*H. H. Remmers* (Purdue).

2086. Schorling, R., Clark, J. R., & Potter, M. A. *Instructional tests in arithmetic; fifth, sixth, seventh, eighth grades and teacher's manual*. Yonkers-on-Hudson: World Book, 1928. \$0.24-\$0.36.—The purpose of this series of tests and manual is to improve the results of instruction in computation in arithmetic by providing suitable drill material. The tests are scored and improvement recorded by the pupil, and they are to be repeated until the desired goal as to speed and accuracy is reached. Part I of the manual describes the tests for the various grades, provides instructions, gives methods of recording scores, discusses the problem of the self-scoring of skill tests, the problem of cheating and that of recurring errors, and gives suggestions for a testing program. Part II presents a discussion of the need for a new type of drill and the new psychology of drill, gives some experimental results of the new type of drill and tells of the construction of the tests.—*L. M. Harden* (Clark).

2087. Symonds, P. M., & Lee, B. *Studies in the learning of English expression. No. I, Punctuation*. *Teach. Coll. Rec.*, 1929, 30, 461-480.—This study reports the analysis of 616 compositions totalling 99,708 words. The compositions had been previously rated on the Hillegas Scale. Tables of frequencies for correct usage, omissions, and errors per 10,000 words for the present study and four others (Willing, Stormzand and O'Shea, Lyman, and Johnson) and of the rank for each school grade of omissions and errors are given. Seven graphs present the findings relative to total usage, total omissions, and total errors per 10,000 words by grades.—*H. H. Remmers* (Purdue).

2088. Valentiner, T. *Berufsbewährung zurückgebliebener Volksschüler*. (Vocational check-up of retarded *Volksschule* pupils.) *Indus. Psychotechn.*, 1928, 5, 159.—Percentage comparisons are given which show rather favorable follow-up results of test ratings of 111 backward school children.—*A. W. Kornhauser* (Chicago).

2089. von Foerster, J. *Psychotechnik und Berufsberatung. Bericht über einen Vortrag von Dr.*

*Hische*. (Psychotechnique and vocational counseling. Report of a lecture by Dr. Hische.) *Indus. Psychotechn.*, 1927, 4, 283-287.—The problems of vocational counseling and some of the methods developed in the psychotechnical institute in Hannover are discussed.—*A. W. Kornhauser* (Chicago).

2090. Witty, P. A., & Fry, M. *The vocabulary content of compositions written by college students*. *J. Educ. Res.*, 1929, 19, 135-138.—An analysis of 340 compositions written by freshmen and upper-classmen at the University of Kansas indicates that 85% of the words used by freshmen and 84% of the words used by upper classmen fall within the first 1,000 words in the Thorndike Word Book.—*S. W. Fernberger* (Pennsylvania).

2091. Wooden, H. Z., & Mort, P. R. *Supervised correspondence study for high school pupils*. *Teach. Coll. Rec.*, 1929, 30, 447-452.—An account of how a small high school enables its pupils to enrich their educational opportunities by correspondence study with recognized institutions.—*H. H. Remmers* (Purdue).

2092. Young, J. R. *Psychological objectives in physical education*. *Amer. Phys. Educ. Rev.*, 1929, 34, 92-95.—Mind and body cannot be separated except by a process of abstraction. Teachers of ordinary academic subjects will do well to remember that games and athletics furnish many valuable types of intellectual, emotional and volitional training. Although corrective gymnastics have been recognized as beneficial to the body, too little attention has been given to the recognition of the value of athletics and games in the correction of psychic abnormalities.—*R. Stone* (Clark).

[See also abstracts 1944, 1958, 1959, 2048.]

## BIOMETRY AND STATISTICS

2093. Buchholz, H. *Die Unmöglichkeit absoluter metrischer Präzision und die erkenntnistheoretischen Konsequenzen dieser Unmöglichkeit*. (The impossibility of precise measurement and the epistemological consequences of this impossibility.) *Neue psychol. Stud.*, 1927, 3, 111-135.—By the deductive method Buchholz comes to the conclusion that absolute mathematical or metric precision is impossible. All measurement is relative. Therefore a pure logico-mathematic or metric continuity does not exist anywhere.—*C. Burri* (Chicago).

2094. Crosland, H. R. *Certain points concerning the reliabilities of experiments in psychology*. *Amer. J. Psychol.*, 1928, 40, 331-337.—A brief review of the controversy on the reliability of experiments in psychology which has recently appeared in the literature is given, and certain conclusions of the author's recent article on proofreader's illusions are modified somewhat in accordance with better statistical technique.—*M. N. Crook* (Clark).

2095. Culler, E. The accuracy of Müller-Urban's method of constant stimuli. *Amer. J. Psychol.*, 1928, 40, 342-345.—The purpose of this note was to remove an obscurity in a recent reply of the author to Urban. The author contends that Urban used a formula for the probable error of a quotient which is applicable only when the numerator and denominator are not significantly correlated, although the two quantities involved may be correlated in any amount.—M. N. Crook (Clark).

2096. Huffaker, C. L. Effect of errors of measurement on the difference between groups. *J. Comp. Psychol.*, 1928, 8, 313-315.—A statistical analysis attempting to determine the effect of the unreliability of measuring devices upon the mean. The resulting conclusion is that "the standard error due to errors of measurement is less than that due to errors of sampling when the measuring devices used possess any degree of reliability."—N. L. Munn (Clark).

2097. Moisescu, M. Zwei abgekürzte Rechenverfahren für den Alltagsgebrauch des Psychotechnikers. (Two short calculation methods for the everyday use of psychotechnicians.) *Indus. Psychotechn.*, 1927, 4, 314-316.—The author describes (1) the method for figuring average deviations which uses only those values above or those below the mean, and (2) a graphic method for translating chronoscopic readings into seconds.—A. W. Kornhauser (Chicago).

2098. Thomson, G. H. Fitting of frequency functions to Urban's lifted-weight results. *Amer. J. Psychol.*, 1929, 41, 70-82.—The author points out what he calls the "tail-assumption" difficulty in fitting Pearsonian curves to Urban's lifted-weight data. The difficulty arises from the fact that the data for the tails are incomplete, which necessitates some assumption with regard to the tails because Pearson's curves are not generally integrable. The author has chosen the bipartite Gaussian tail-assumption as the best of several alternatives, and gives detailed rules for the use of it, with illustrative data.—M. N. Crook (Clark).

2099. von Foerster, J. Nomogramm zur Rangkorrelationsformel. (Nomogram for the rank correlation formula.) *Indus. Psychotechn.*, 1928, 5, 116-118.—The author presents a chart for reading rank correlation coefficients and their P.E.'s when the  $\Sigma D^2$  and  $N$  are known.—A. W. Kornhauser (Chicago).

# MENTAL TESTS

2100. Couvé, R. Eignungsuntersuchung und Charakter. (Aptitude research and character.) *Indus. Psychotechn.*, 1928, 5, 53-57.—The author points out the special difficulties in the way of character tests.—A. W. Kornhauser (Chicago).

2101. Freeman, F. S. A note on the intercorrelation of intelligence tests. *Amer. J. Psychol.*, 1928, 40, 349-350.—The four parts of Series II, Examina-

tion C, of the Dearborn Group Test of Intelligence given to 88 children 9 years of age show correlations between any two parts of from .11 to .50, while the parts correlate with the total from .57 to .77, indicating that in "psychological fact" it is possible to approach the mathematical desideratum of low intercorrelations and high correlations with the criterion.—E. R. Hilgard (Yale).

2102. Furfey, P. H. Tests for the measurement of non-intellectual traits. *Cath. Univ. Amer., Educ. Res. Bull.*, 1928, 3, No. 8. Pp. 35.—With a statement of the more important bibliographies on personality testing, and a note of the critical reviews, the author confines his summary to the "tests of the pencil-and-paper variety." He then recognizes that these tests are in such an experimental stage that they "have not become well enough standardized and systematized to fall into any recognized classification," and suggests a five-fold division, as follows: (1) the "attitudes" technique, (2) the "activities" technique, (3) the "psychoneurotic-questionnaire" technique, (4) the "relative-abilities" technique, and (5) the "objective-situations" technique. Illustrations, conclusions, and correlations are presented for certain tests under each type of technique. The author concludes that the review shows "such tests are markedly inferior to our best intelligence and achievement scales." They are so inferior that "few if any of them are perfect enough to be of practical use except to research workers." These tests, however, are being constantly improved. A bibliography covers the other bibliographies, reviews and tests discussed.—R. A. Brottemarkle (Pennsylvania).

2103. Gavit, J. P. The definition of intelligence. *School & Soc.*, 1929, 29, 228.—Intelligence is defined as the "totality of awareness of environment." "The degree of an individual's intelligence is that of the efficiency and accuracy of his perception, the dependability of his memory, reflection and inference, and of the resulting expertness of manipulation of his whole conscious being in its relationships of all kinds, physical, mental, spiritual, with his neighbors in the universe."—H. L. Koch (Texas).

2104. Henning, H. Charaktertests. (Character tests.) *Indus. Psychotechn.*, 1927, 4, 270-273.—The author explains and defends a type of character test which he is developing, wherein the subject works with one or more other persons and is influenced by this relationship.—A. W. Kornhauser (Chicago).

2105. Kefauver, G. N. Need of equating intelligence quotients obtained from group tests. *J. Educ. Res.*, 1929, 19, 92-101.—Discussion of the results obtained by Miller, which indicated wide variation in intelligence quotients, especially at the extremes, on each of 12 different group tests used. "This error can be corrected by converting the intelligence quotients into a common measure, percentile rank or standard deviation score; or preferably, in order to retain the measures as intelligence quotients, by converting the intelligence quotients of the



various tests into a test commonly used." A table for making such conversions is appended.—S. W. Fernberger (Pennsylvania).

2106. MacCrone, I. D. Preliminary results from the Porteus Maze Tests applied to native school children. *So. African J. Sci.*, 1928, 25, 481-484.—A small number of native school children from an urban area were tested with the Porteus Maze Tests. A few tentative conclusions are arrived at, viz.: that the average level of performance of native school children at each age is definitely lower than the corresponding level of Burt's London school children; that somewhere between the ages of 11 years and 12 years there appears to be no further significant rise in the average level of performance of the native children, while for the London children the point at which there appears to be no further rise in the average level of performance falls somewhere between the ages of 13 years and 14 years; and that there is a distinct and progressive slackening in the rate of growth of the ability (whatever it may be that is measured) as it approaches the point at which it ceases to grow. Different types of behavior in solving the problems are distinguished.—H. F. Verwoerd (Stellenbosch).

2107. Roszmann, R. Verwendung eines Diktierapparates bei Intelligenzprüfungen. (Use of a dictaphone in intelligence testing.) *Indus. Psychotechn.*, 1928, 5, 25-28.—Valuable information supplementing written responses may be gained by having the oral responses of the subject recorded. A small dictaphone was employed for recording the subject's descriptions of pictures. Several types of response are described and illustrative examples are reproduced.—A. W. Kornhauser (Chicago).

2108. Thompson, E. M. The Stanford Revision vocabulary test. *So. African J. Sci.*, 1928, 25, 461-463.—Individual testing aroused a doubt as to whether the two halves of the test were equally difficult and whether the words were arranged in the correct order of difficulty. The words in each list were arranged and given as a group test. It appeared that the words in neither list were in the correct order of difficulty. The results also showed that the test has a high degree of reliability, independent of age, and that at least part of the impression of unreliability was due to the lack of balance between the two sections.—H. F. Verwoerd (Stellenbosch).

2109. Townsend, R. R. Tests of the Stanford Revision of the Binet-Simon Scale most frequently failed by children in orthogenic backward classes. *Psychol. Clin.*, 1928, 17, 200-203.—100 cases of 10-

year-old children, all of whom had been recommended for placement in an orthogenic backward class, were given the abbreviated Stanford. The results are presented in tables and show that for children of this type the starred tests of the scale are not arranged entirely according to difficulty. The test most frequently failed was the reverse digit span.—J. T. Metcalf (Vermont).

2110. Washburn, M. F., Keeler, K., New, K. B., & Parshall, F. M. Experiments on the relation of reaction-time, cube fluctuations, and mirror drawing to temperamental differences. *Amer. J. Psychol.*, 1929, 41, 112-117.—This study was made in an effort to find whether groups of observers representing opposite extremes of certain temperamental traits would show a corresponding difference in (1) speed of reaction to noise, (2) variability of such reaction-time, (3) rapidity of the fluctuations of an outline cube figure, (4) speed of movement in mirror tracing of an outline star, and (5) number of errors made in the first mirror tracing of the star. Four groups of college girls served as O's; these groups were emotional-calm; irritable-non-irritable; timid-fearless; and extrovert-introvert. The differences which appeared between the pairs were not statistically reliable; the individual variations were too large. Certain tendencies, however, appeared: (1) A tendency for extroverts to make quick reactions and for introverts to make slow reactions to a noise stimulus. (2) A tendency for the first 10 reaction-times of emotional O's to have larger average deviations than those of calm O's. (3) A tendency for timid O's to make fewer errors in tracing an outline star by mirror drawing. Some other tendencies are less consistently indicated.—D. E. Johansen (Clark).

2111. Witty, P. A., & Lehman, H. C. Further remarks upon character testing. *Psychol. Rev.*, 1929, 36, 91-95.—A reply to Woodrow's criticism (*Psychol. Rev.*, 1928, 35, 338-350) of an earlier article (*Psychol. Rev.*, 1927, 34, 401-414) by the writers.—H. Helson (Bryn Mawr).

2112. Young, M. H. A comparative study of audito-vocal digit spans. *Psychol. Clin.*, 1928, 17, 170-183.—A study, in which 1,760 cases were used, of the Forward Digit Span, the Backward Digit Span, and the Digit Learning Span Tests. The learning span was regarded as the longest series of digits learned on ten or less trials. The three tests are studied in relation to each other on the basis of the results.—J. T. Metcalf (Vermont).

[See also abstracts 1849, 1857, 1858, 1988, 2065, 2069, 2079.]



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